— THE —

# Therapeutic Gazette.

Old Series. Vol. V. | Detroit, July 15, 1882. | New Series. Vol. III, No. 7

CONTENTS.

Original Department.

PAGES

Ergot. By J. J. Mulheron M. D..... 241
Populus. By Willard H. Morse, M. D. 245
Science in Therapeutics. By S. M. Curl, M. D., F. L. S..... 247
Railroad Surgery. By J. W. Trader, M. D..... 250
Damiana and Chaulmoogra Oil. By Wm. Fahy, M. D..... 252
Therapeutic Notes. By William A. Caveness, M. D..... 253

Translations.

Oil of Turpentine in Small Doses.... 253
Convallariæ Majalis Flores..... 254

Correspondence.

Chemical Constitution of Jamaica Dogwood .. . ..... 254
Notes on the New York "Code"—Jamaica Dogwood, Berberis Aquifolium, and Cascara Sagrada..... 255
A System of Gynæcology by American Authors..... 255
A Practical Point in the Use of Nitro-Glycerine Pills..... 255

PAGES

Editorial.

The Therapeutics of Venesection.... 256
Secret Remedies..... 257
The Bromides..... 258
A Reason why Physicians are Sometimed Disappointed in the Action of Drugs..... 259
The Remote Effects of Nostrum Prescribing ..... 259
American Medical Association..... 260
National Adulteration Bill..... 260
Chemical Constitution of Jamaica Dogwood..... 261
Aggregation—Not Patentable..... 261
A Museum of Hygiene..... 261
An Argument in Favor of the Therapeutic Value of Indigenous Plants 262

Abstracts.

The Effect of the Mind on the Body as a Therapeutic Agency..... 262
The Treatment of Diabetes..... 263
Drinking Water and its Relations to Public Health.... .. ..... 264
The National Adulteration Bill..... 264
Grindelia Robusta..... 265
An Eye Wash for Dissolving Metallic Foreign Bodies in the Eye..... 265
Can Diphtheria and Scarlet Fever be Prevented?..... 266
Calabar Bean in Obstinate Constipation..... 266

PAGES

The Plant vs. Its Active Principles.. 266
The Disease of Modern Life..... ... 266
Season and Human Growth..... 266

Book Reviews and Notices. 267

Therapeutic Progress.

Interesting Proceeding..... 269
On the Treatment and Prevention of Hay Fever ..... 270
On the Treatment of Chancre by Glycerinum Boracis..... ..... 271
Influence of Anæsthetics on the Heart, and on the Antagonisms of Poisons..... 271
The Physiological Action of Blood-Letting ..... 272
To the Medical Profession..... 272

New Remedies.

Avena Sativa as a Specific for the Opium Habit..... 273
Viburnum Prunifolium..... .... 274
Grindelia Squarrosa..... 275
Papaw in the Treatment of Chronic Eczema..... ..... ... 276
The Nutritive Value of Beef Tea..... 276

Society Proceedings.

American Medical Association..... 276

## Original Department.

### Ergot.*

By J. J. Mulheron, M. D.† Detroit, Mich.

WE take up to-day the consideration of ergot, one of the most important and best understood agents of the materia medica. Chemical analysis, physiological experiment and therapeutic results have combined to make it one of the few drugs which may be intelligently prescribed and, for our knowledge of the therapeutic properties of which we are the least dependent on empiricism. It illustrates, as few other substances do, the value of physiological investigation and the aids derived from the exact divisions of medicine in determining the medicinal virtues of a drug. Its action on healthy tissue having been accurately determined, and the exact pathological condition in disease being known, the results of the administration of ergot may in certain cases be foretold with almost mathematical certainty. It becomes the student, therefore, to be especially familiar with this drug, not only because of its importance, *per se*, as a therapeutic agent, but also because of its illustration of the applicability of the physiological method in therapeutics.

Ergot belongs to the natural order of fungi. The ergot fungus is found on nearly all the graminaceæ, but the name has come to be synonymous, in the physician's vocabulary, with ergot of rye. The ergot of maize has latterly been highly spoken of in some quarters, but the name "ergot" has become so intimately associated with the rye fungus that it will probably never be dissociated.

Ergot is the second stage in the evolution of a biennial fungus to which the name claviceps purpurea has been given. It is most apt to attack rye during rainy seasons, but dampness is not an essential condition of its origin and development. As found in commerce, it consists of fusiform bodies varying from half an inch to an inch and a half in length, and from the twelfth to the sixth of an inch in diameter. The grains are subcylindrical in form, sometimes obtusely triangular, tapering at both ends, usually very slightly curved, having three longitudinal furrows and an easily detached, yellowish, small appendage or hood at the apex. Externally its color is purplish black, but when broken transversely the fractured ends are whitish. It has a peculiar, unpleasant odor,

* Abstracted from a lecture given at the Michigan College of Medicine, Detroit.

† Professor of Institutes of Medicine, Materia Medica and Therapeutics.

particularly when moist, which has been variously likened to that of mice and that of spoiled fish. Its taste is mawkish, oily and acrid.

The source of the great bulk of the ergot employed in medicine in this country is European. Although the fungus is found in America, it occurs in quantities too small to make the gathering of it profitable, a fact probably due to the improved modes of agriculture here as compared with the more primitive methods in vogue in those European countries which supply ergot in the greatest abundance and of the best quality, viz., Russia, Spain, and certain parts of Austria and Italy.

Ergot is very difficult of preservation, its fixed oils being very liable to turn rancid with exposure to the air. It is also frequently attacked by a mite which destroys it. It is most liable to deterioration when powdered, although the addition of five per cent. of benzine is said to prevent degenerative changes for a long time. Small quantities may be successfully kept for a considerable period in a closely stoppered bottle into which a piece of camphor or a little cotton saturated with chloroform has been placed. A plan of powdering it with sugar and covering of it with powdered wood charcoal, have also been recommended, but ergot over a year old is usually very unreliable. This of course does not apply to the fluid extract or other alcoholic preparations of the drug; these, properly prepared, keep for an indefinite time.

The activity of any particular lot of ergot is very largely conditioned on the manner and time of its gathering. If picked too early it is inactive. The quality of the lot is also dependent on the nature of the season, with regard to heat and moisture, at which it is gathered. These facts doubtless explain the lack of expected results which is sometimes reported, and admonish the practitioner to prescribe in urgent cases only such preparations as are the product of a reliable pharmacist—that is, one whose reputation is a sufficient guarantee that his preparation has been ascertained to possess the required percentage of active constituents before it was placed on the market.

Chemically ergot is a very complex substance, and, as might be very naturally inferred from the fact that it is but an agglomeration of fungi, its constituents are very liable to variation as regards their number and the quantity contained in a given specimen. It is characterized by a multiplicity of uncrystallizable principles, a fact which has been conjectured to be due to the low organization which prevents the formation of well characterized principles, those which are formed being also very readily altered. The peculiar nature of the drug in this regard has made it a very difficult substance for chemical investigation.

Ergot contains many ingredients which are inert in so far as the characteristic properties of the drug are concerned, and while a consideration of these would be interesting to the chemist, it scarcely comes within our province. These inert constituents form the bulk of the crude drug, the active principles existing in comparatively minute proportions. The experiments of Dragendorff and Podwissotzky have given us more definite knowledge of the active constituents of ergot than was previously in our possession, and the conclusions of these experimenters have been abundantly corroborated by those determined by other observers. It is, therefore, now a pretty well established fact that ergot depends for its peculiar physiological action upon its constituents, sclerotic acid and scleromucin, the former being the more active of the two. The so-called ergotine which is found in the market, and which is falsely claimed to be an isolated active principle, is nothing more than a concentrated solid extract of the drug, and is only recognized as such in the German Pharmacopœia. Ergotin and ecbolin, chemical principles, are not active principles, that is, they are incapable of inducing the contraction of tissue which is characteristic of the drug.

*Physiological Action.*—The effect of the local application of ergot is to restrain, after the manner of an astringent, the action of the part with which it comes in contact. That it does this through any vital action on the tissue, having first been absorbed from the part, is not clear, and the claim of Mialhe that it operates only by coagulating the albumen of the tissue is now generally conceded. Applied to an abraded surface it acts as an irritant, and such applications continued for any considerable time to the mucous membrane, causes dryness and eventually irritation and inflammation. Its effect on the primæ viæ is similar to that of the vegetable astringents, large doses disturbing the digestion, causing nausea, a feeling of oppression at the stomach, coating of the tongue, and frequently through excess of astringency causing intestinal irritation which manifests itself in diarrhœa following constipation.

Experiments have shown that ergot has a poisonous influence on vegetable and the lower forms of animal life. The herbivora are more tolerant of it than are the carnivora, man occupying a middle place in this regard. The symptoms of ergot poisoning are classified as acute and chronic. The consideration of these is, however, of interest only in a scientific sense, inasmuch as they may be said never to occur during the medicinal employment of the drug, and the gangrene, etc., resulting from the use of bread made out of ergoted rye never occurring in this country. In the part to be affected there is first a feeling of cold, after which an erysipelatous redness attacks it. The epidermis is soon raised by serous exudation, after the escape of which, usually dry, though sometimes moist, gangrene is seen to develope. At first there is considerable pain, but afterwards the parts are insensible. The toes and feet are most frequently attacked, the fingers and hands less frequently, and instances of the nose and ears being affected are also reported. The systemic symptoms are a low continued fever, and phthisical symptoms may develop. Death results from pyæmia or septicæmia and exhaustion. The disease may continue for months, although it is usually of short duration, and especially when the local disease is extensive. Post mortem examination reveals none of the occlusion of arteries which we might reasonably expect.

Of more interest to the physician are the untoward effects of the drug, liable to occur during the course of its medicinal employment; effects which are not properly poisonous, but due to idiosyncrasy of the patient. These effects are indicated by Prof. L. Lewin, of Berlin, in his admir-

able work on the "Untoward Effects of Drugs," from which we make the following quotations bearing on this subject:

The extractum secale cornuti of Wiggers, as does also that of Bonjean, produces, now and then, in medicinal doses—0.2 to 0.4 gramme (gr. iij to gr. vj)—sickening taste, irritation of the throat, increased secretion of saliva, nausea, burning in the stomach, abdominal pains, eructations, vomiting and diarrhœa. Associated with certain of these symptoms we may have confusion of thought, headache or sensations of chilliness, dizziness, dilatation of the pupils and also general debility, uncertainty of gait and irregularity of the pulse. Apart from the idiosyncrasy of the patient, the differences in the action of this drug are probably traceable to the variability in the chemical constitution of the preparations employed.

"Following the hypodermic employment of ergotin, first recommended by von Langenbeck, (after the following formula: Ext. sec. corn. Bonjean 2.5 gramme[ gr. lx], spts. vini et glycerini 7.5 [ʒij] ), a series of undesirable untoward effects were observed. Von Langenbeck noticed after an injection of 0.3 gramme (gr. v.) a glimmering before the eyes and pain in the shoulder. Eulenburg noticed dizziness and vomiting under similiar conditions.

The general symptoms were more threatening in a case reported by Rezek, in which 0.04 gramme (gr. ⅔) of ergotin had been injected. Five minutes after this injection the patient was seized with several general convulsions, the pupils became dilated, the eyeballs rolled, loss of consciousness supervened, the skin became cool and pulse disappeared. These symptoms subsided under cold douches and the internal administration of ether.

Hildebrandt observed symptoms which were milder. Following six injections in the case of a female, the patient became dizzy and unsteady of gait; spasmodic contractions of the flexors of the upper and the lower extremities, nausea and constriction of the chest also occurred. The symptoms disappeared with the suspension of the drug to return with its resumption.

Of more frequent occurrence than these general systemic disturbances are the symptoms, of greater or lesser intensity of localized reaction. This is most marked after each hypodermic injection at the point of penetration, around which there occurs a painful nodular infiltration which does not go on to suppuration. Hildebrandt, who employed the plan of injecting ergotin for the relief of fibro-myoma of the uterus, believed that the pain which thus ensues is due to the presence of alcohol in von Langenbeck's solution, which is employed. He employed, on account of this a solution of ext. secale cornut. aq. 3.0 grammes (gr. xlv) to glycerine and water, of each 7.5 grammes ( ʒ ij), following which he observed less pain, although there still remained persistent nodules of the skin, which were somewhat sensitive.

Bengelsdorff saw also as a result of injections of ergotin, after Hildebrandt's formula—the ergotin in which is not fully dissolved but remains principally in suspension—a frequently decidedly painful and not infrequently positively phlegmonous, non-suppurating inflammation, encircling to a greater or less circumference the point of injection. Accompanying this there was usually a hard, nodular swelling, varying in size with the size of the injection, which frequently remained for eight days and over. The nodules could not be prevented either by deep insertion of the cannula or by rubbing."

All experimenters are agreed on certain of the effects of ergot, regardless of the modus operandi of the drug. It is, for instance, conceded that under its influence there is contraction of the arteries of the system, that blood pressure is increased, that there is a lowering in the frequency of the heart-beat and of the pulse, and although all physiologists do not refer to the fact, the claim that the drug when given in overdoses causes dilatation of the pupil and coldness and anæsthesia of the surface, is not controverted. But how are these effects brought about? Upon what tissue does the drug primarily act to thus affect the nonstriated muscular tissue, or does it act directly on the tissue itself? If it operates through the nervous system does it do so by action on the nerve centres or on the periphery of the nerves? Herein there is room for speculation and actual difference of opinion. While all physiologists agree that ergot increases the inhibitory action of the sympathetic, thus causing the arteries to contract, it has been shown by Brown-Sequard that the drug produces its characteristic action, though in a less intense degree, even after the sympathetic has been cut. This being so, it follows that ergot is not confined to a single method of operation; it may and does act through the sensori-motor nerves or by stimulating the periphery of the sympathetic.

It would be interesting as well as profitable to follow in detail the many experiments which have been conducted with a view to determining the modus operandi of ergot, but to do so would be foreign to our present purpose and we must be content with a plain statement of the fact that ergot causes tonic contraction of the involuntary or nonstriated muscular tissue of the body. It is upon this physiological fact that its therapeutic value is based, this fact furnishing the clue to the exhibition of the drug in disease.

*Therapy.*—It would seem almost sufficient under this head to affirm the physiological property of ergot and to dismiss the subject with the remark that the drug is indicated under all conditions in which the contraction of the involuntary muscular fibre is necessary to the relief of the part affected. It is necessary, however, to specify the affections in which this contraction is indicated:

The first use of ergot which we shall consider, and in connection with which the drug first won its reputation, is in affections of the uterus. There is no practitioner of medicine who is not familiar with the action of the drug on the impregnated organ.

As a *Parturifacient* its place in the materia medica is fixed, and, singularly enough, we know but little more regarding its indications and contra-indications now than was enunciated by Dr. Stearns, who, in 1807, introduced the drug to the notice of the profession of this country. His five rules for its use have not been materially

altered or amended since his day: 1. In lingering labors when the child is low, the parts relaxed, the pains absent or feeble, and there is danger of delay from hemorrhage or other alarming symptoms. 2. When the pains are suspended and convulsions set in, premising venesection. 3. In inevitable abortion. 4. When the placenta is retained by uterine inertia. 5. In postpartum hæmorrhage under like circumstances. It had been well had practitioners since his day had these rules engraved on their memory. It would have saved the drug from much of the disrepute into which a neglect of them has brought it, for there is much mischief chargeable to the use of ergot in the lying-in room.

Ergot is employed with comparative infrequency as an expulsive agent since the value and proper manner of the employment of the obstetric forceps have been inculcated. Usually when the way is open for the employment of ergot, and when it is indicated for expelling the child, the parts are also in a condition rendering the use of the forceps justifiable, and, as a rule, the latter are to be preferred under such circumstances.

Ergot is probably more valuable as a prophylactic against the accidents of childbirth, and as an aid in the third stage of labor, than as an aid in the second stage. Dr. Meigs, the veteran obstetrician of the country, first prominently advised the use of ergot for other than expulsive purposes, and the leading obstetricians of to-day endorse his views by their practice. The time for its administration is when the head of the child is pressing hard on the perinæum, and when, in the judgment of the accoucheur, delivery will be accomplished within ten minutes after the administration of the dose, or just before the drug has commenced to exert its characteristic action on the womb. We in this manner not only ensure the contraction necessary for the expulsion of the placenta, but bring about that firm contraction and "wooden" feel of the uterus, without which there must always remain some anxiety in the mind of the physician regarding septicæmia, for in the absence of this condition there is no assurance that blood clots are not entangled in the uterine sinuses, where, undergoing decomposition, they are likely to cause blood poisoning or puerperal fever. In my opinion were practitioners not to leave the bedside until this firm contraction of the womb has been secured, the disastrous sequelæ of physiological labor would be much less frequent, if, indeed, they would not be entirely eliminated from obstetrical practice. And to secure this contraction ergot is *par excellence* the remedy, and it should be given in the dose of one fluidrachm of a reliable fluid extract immediately before the expulsion of the child. The authority for this practice is high and experience in my own practice has abundantly corroborated it. The danger of hour-glass contraction of the womb following such use of ergot is too small to seriously vitiate the rule.

The danger of the child from the use of ergot is sufficiently great to admonish against its use as an expulsive agent and to place it far below the forceps for this purpose in the hands of the experienced accoucheur.

In post partum hæmorrhage ergot may be employed in conjunction with other means, but its action is too slow to justify full reliance being placed on it. During the ten minutes or so necessary to secure the action of the drug, the woman may have become exsanguinated. It is as a prophylactic rather than as a curative that ergot finds its great value in such cases.

*In Uterine Congestion.*—Ergot occupies an important place in the armamentarium of the gynæcologist. In the treatment of uterine congestion. its physiological action points directly to its use, and experience has demonstated the correctness of the aim. The congestion may be passive (venous) or the active determination of blood which is the precursor of metritis and in either case the benefits accruing from ergot are marked.

*In Leucorrhœa.*—Leucorrhœa is, of course, due to so many causes that it would be impossible to suggest any remedy which would meet all the indications in its treatment. In those forms, however, in which the discharge is of glairy nature and associated with a congestion of the womb (uterine leucorrhœa) it is a valuable adjunct in treatment.

*In Uterine Tumors.*—Ergot has become the sheet anchor in the treatment of uterine fibroids, polypi, etc. It acts in such cases either by expelling the growth when it is so situated as to permit of expulsion, or by causing its compression in a manner to promote its absorption, or through contraction cutting off the supply of blood on which it grows.

*In Hæmorrhages.*—In hæmoptysis, hæmatemesis, hæmaturia, epistaxis, etc., and more especially in the former of these ergot has been proven of value. The physiological action of ergot, its increase of blood pressure particuarly, would seem to contraindicate its employment in hæmorrhages of a more active nature. Although the blood in hæmoptysis is arterial in its nature it is not distinctively so in the sense in which the term is usually employed, and bleeding from the lungs may very properly, notwithstanding the nature of the blood, be regarded as passive rather than active. On this view of the nature of hæmoptysis the technical objection to ergot in its indication as a remedy is thoroughly established. It acts as a hæmostatic by contracting the nonstriated musular tissue in the arteries, capillaries and veins (?), thus diminishing the calibre of the vessels and facilitating the formation of the clot, through coagulation of the albumen, which plugs up the bleeding end. This is the philosophy of its action, and its use is indicated wherever there is bleeding of the nature indicated.

*In Diarrhœa.*—There are certain forms of diarrhœa in which, theoretically, ergot is indicated, viz., in a congested condition of the mucous lining of the canal due to the atonicity of the fibre. This condition is apt to obtain as a sequel of the more acute attacks of summer diarrhœa in children, and the treatment of this condition has of late years received a number of testimonials to its efficacy in current medical literature.

In *Diabetes Insipidus.*—Within the past year ergot has been recommended by good authority in the treatment of this distressing affection. The time during which it has been employed is, however, too short to permit of any positive assertion regarding its value, and we must be content with the statement

that it was found in two cases to effect a reduction of the quantity of urine secreted, and ultimately to effect a complete recovery.

In *Prostatic Enlargement.*—In this evil of old age we have in ergot a remedy which it is claimed has no rival in the materia medica. This is a very distressing affection, and one which, without ergot, is comparatively uninfluenced by medicine. Should the future use of this drug justify the claims which have been made for it in the last few years, it will prove a great boon to many who reach the sere and yellow leaf only to realize that the remainder of their days is to be a period of torment. Under its use the enlargement of the gland is said to disappear, with the consequent improvement in the urinary and other symptoms.

In *Hæmorrhoids.*—In an acute attack of piles the result of the use of ergot has not been satisfactory, but in the chronic enlargement, its injection into the substance of the tumor is said to have been followed by successful results.

In *Incontinence of Urine.*—In this affection, when the cause resides in atonicity of the sphincter, ergot, through its influence on the nonstriped fibre, supplies the lacking tone. The affection is one in which, it may be remarked by the way, empirical methods of treatment are very unsatisfactory. In few diseases is a correct conception of the pathological condition more necessary to successful treatment.

In *Aneurism.*—The first few cases of the use of ergot in aneurism raised hopes which subsequent experience has unfortuuately disappointed. That the drug, in virtue of its physiological property, is theoretically indicated in cases of this nature must of course be conceded, but experience in its use has made it probable that the rest and pressure which it is usual to associate with the ergot treatment are quite as important as agents in the cure of successful cases.

*Preparations.*—As intimated at the opening of this lecture, the reputation of ergot in the hands of the physician is conditioned on the quality of the drug or the nature of the preparation employed. Ergot being extremely prone to deterioration is so apt to be found of very inferior quality in the shops of retail dealers that its use in this form has been almost entirely suspended in practice. The preparation now almost universally employed is the fluid extract and when it is satisfactorily guaranteed that the crude drug from which this is prepared was of prime quality it is safe to rely on this preparation in an emergency. Such a guarantee is, however, not always practicable and it has come to be the custom of many practitioners to buy a pound of the fluid extract and to test it on cases of lesser importance to assure themselves that it may be depended on in the hour of trial.

The dose of ergot is from 10 grains to 60 grains, or from 10 minims to a fluidrachm of the fluid extract.

[A new preparation (not yet officinal) has lately been introduced, the Liquor Ergotæ Purificatus, and the principle on which this is prepared at once commends itself to the physician. It is claimed to contain the active principles, sclerotic acid and scleromucin, in fixed and definite proportions, and is thus independent of the quality of the crude drug from which it is prepared, the latter as well as the finished product being assayed. There is no room for conjecture in a preparation of this nature, and it may be administered with as much certainty of result as attends the employment of the isolated active principles of any other drug.—ED.]

## Populus.

By Willard H. Morse. M. D., Pittsfield, Mass.

AMONG the many so called substitutes for cinchona, one of the least known, most untried, and best, is the bark of the populus tree. This therapeutical agent owes its worth and its virtues to a crystallizable principle which has been named populin, and is to the populus bark as is quinine to the bark of cinchona. As quinine was formerly degraded and preached against and then apotheosized, so seems to bloom the fate of populin. It has come to notice with all reality of modesty, and is not bold in its claims. Not once has it urged its own value, and not at all has it claimed to do the work that quinine all ably is doing. But that work it does and does admirably, so that on its first page its title is written.

Botanists reckon six species of the genus populus, namely, P. nigra, P. tremula, P. tremuloides, P. gravididentata, P. levigata and P. monilipra. There is also the P. candicans or balm of Gilead poplar, and the P. balsamifera. The latter is, however, more properly a member of the genus fagara. Of the six principal species, P. nigra, the black poplar, is a native of Europe, and its very abundant resin is officinal in some of the European States. It is, however, almost unknown in this country, and there is a question as to its production of populin.

P. balsamifera grows extensively in British America and Siberia, and P. gravididentata and P. levigata are common to the same wilds. Each and all of these three species and P. monilipra as well, are balsamic, and exude a resin which is known widely and popularly as "tacamahac," and is sold as such. The Indians and Kamschatkales who gather it, visit trees of each of the three species for that purpose; but although the tacamahac of commerce is a product of three species, the resin that exudes from P. balsamifera is reputed the best. In several of the European States the leaf-buds of P. nigra and of P. balsamifera are gathered from the tree as cultivated in private grounds, and are used as a basis of a tincture, a liniment, an ointment and a syrup. These buds are slightly bitter, intensely terebinthinous, and pungently balsamic. On analysis they yield a resinous oil which is remarkably agreeable to the taste, and is added to some of the Irish whiskies as a "corrector" (to use the term of the distiller.) The liniment that is prepared from the leaf-buds is made by maceration in oil, and is used externally for rheumatism by the French peasantry in several of the departments. The tincture is also quite popular with the same people, and in Germany, as a remedy for pneumonia, bronchitis, and allied pectoral complaints. I was told by an old physician that he had employed it in Bright's disease with evidence of success, and was accustomed to give the tincture as an agent in the treatment of rheumatism, in conjunction with the local use of the oil. The *unguentum populum* of the French Codex is prepared as follows:

Belladonnæ foliæ, recent.
Hyoscyami foliæ, recent.
Papaver nigra foliæ, recent.
Solanum nigrum, recent, ää 250 parts.
To be boiled in adipis, 2,000 parts.
Then add the dried buds of p. nigra, 375 parts.
Digest for 24 hours; strain.

This ointment is used for sprains and other local affections requiring an anodyne, and has a fine reputation.

But we of the profession in America have had but little to do with the European poplars, or with the poplars of the northern parts of our own continent, known though they are to us all. Beyond a doubt they have a therapeutical place which they will occupy, but their class in our materia medica is not only unofficinal, but without position.

To us more important in the genus populus is another species, or in point of fact, two species. Those two are the p. tremuloides of Europe and the p. tremula of the United States and Canada. Who does not know the graceful aspen of our American groves! And as familiar to the eye of the dwellers in Northern and Central Europe is their aspen. From Alaska to the woods of the Tennessee,—from the highlands of Scotland across Europe to the Euphrates,—there are perhaps few better known trees than the aspen. We who have stood in its shadow on the mountains of New England, or in the meadows of Ohio, recognize no difference between the general shape of the American tree and that of the same name with which we chance to meet in Saxony or on the capes of the Ionian Sea; but where the two grow side by side there is a difference of outline character as well as of leaf and bark. Yet practically the aspen of America and of Europe is identical, and considered therapeutically, this case is in no wise different. There has come down to us the unspent tradition that the Christ suffered death on a cross made of aspen-wood, and that ever since His death the aspen-leaf has never ceased to tremble. This traditionary fact giving the generic name to the two species, is borne out by a resemblance in the leaf-stems.

In speaking of p. tremula or p. tremuloides, I shall not differentiate, and under the common name of aspen shall treat of both populi.

The aspen is familiar to all. A small tree, in height varying from the shrub that for years barely peeps over Virginia rail-fences, to that of the beautiful specimens of thirty and forty feet, it rarely, if ever, attains to a diameter of more than fifteen inches. By preference it secures a foothold on the borders of forests, and is not uncommonly found in social groves into which no other trees intrude. The trunk is clothed low down, and though the tree be in a poor situation, or on rocky ground, it is invariably graceful, raising its head with elegant pride, and forming an ornament to forest and lawn alike. The botanical details are not numerous. Belonging to the natural order of the salicinæ, and standing cousin german to the willows, it claims a place in the family of populi. The leaves are alternate, of a triangular-ovate shape, grayish-green above the pale-gray beneath. They are mounted on laterally-compressed footstalks, which are slender, though tenacious and woody. The flowers appear in Northern America and Europe in April, and are loosely arranged in aments with twenty or more stamens. In autumn the tree is early deciduous and loses none of its grace when its leaves fall.

In some of the districts of Northern Italy the bark of P. tremula has long been used as one of the bases of a tonic bitter, and among the old ladies of our own country "popple bark" has been popular for the same purpose. From this humble beginning the bark has worked out for itself a certain position. In some of our backwoods districts the old physicians have put it into their "bitters" with sassafras bark, juniper berries, and the like, from an early date. But it has never come up to an equality with other barks, as wild cherry and ash. Naturally the more educated physicians have been chary of adventuring in the use of such a questionable remedy, and as is all too much the custom have not condescended to the use of an agent that is beloved by their less polished brethren.

But while American physicians had not dared to touch the remedy, in France the spirit of investigation grew apace. That prince of French savants, M. Braconnot, exerted his chemical researches on the bark which he found so much respected in his native department. The close relation between the poplar and the willow attracted his thoughts, and when he carried the populus bark to his laboratory it was that he might seek the bitter principle of the bark of the salix. He was not surprised therefore, when he demonstrated the presence of salicin in the allied bark. But the presence of another salt asserted itself. It was a crystallizable principle and the chemist studied it for many weeks or months before he modestly presumed to name it populin and designate it as the prime constituent principle of the bark to which even the petted salicin was fairly secondary. Braconnot had made a grand discovery, but he never dreamed of its importance. It was published with becoming modesty, and other chemists in Europe substantiated the Frenchman's fact. All in the slow course of crude time the story reached the United States, and in a quiet way was proven true.

It was soon demonstrated that p. tremuloides had the same power of product as has its European namesake, and the richness of its production, never suspected by even the acute Braconnot, was brought forth here. The research has gone on year by year, and the analysis is now a common thing. I think that a brief delineation of the process will not be supererogatory to most of our readers. My favorite mode of analysis is as follows:

A saturated decoction of the recent or dried bark is carefully prepared, and after being allowed to cool, a solution of sub-acetate of lead is added without any rough attempts at admixture. After filtration, the super-excess of lead is precipitated by a sufficient quantity of sulphuric acid. A second filtration now follows, and after this the liquid is slowly and carefully evaporated. When this latter process is almost complete, a small portion of animal charcoal is thrown into the evaporator. The third and last filtration now follows, and it is essential that the liquid be at a boiling heat. and perfect cleanliness be preserved. When the filtrate is quite cool, the beautiful white and slender crystals of salicin are found to have separated, and bear the marks of the highest purity. Agitation of the liquid, or any impatience at this time, is disastrous to the hopes of obtaining populin. But if, after waiting until all signs of salicinic crystalli-

zation has ceased, a concentrated solution of potassium carbonate be added to the liquid, all excess of sulphuric acid is removed, and the precipitate which is found is populin. After all crystallization has ceased the spent liquid is turned off, and the crude salt, on being re-dissolved in boiling water, is deposited in the form of crystals of dazzling whiteness, and exceedingly light.

Populin thus prepared is of a peculiar bitter and rank taste. The poplar leaves produce a sweeter article of the salt than does the bark. It is readily decomposed into a virgin liquid. Its solubility is obtained in 1800 parts of cold water, in 70 parts of boiling water, in hot alcohol, and in the mineral acids.

The re-direct analysis of populin brings out several points of interest. It was soon demonstrated to be a complex salt, and, like salicin, was subjected to thorough analysis. The results are instructive. Both salts are produced in the same way, and both contain as principles saligenin and certain glucosides. Another and not an unimportant constituent of populin is benzoic acid. As might naturally be expected, a conversion of populin into salicin is readily performed, and the agent of instigation is the separation of the benzoic acid. Piria's method of this performance is the boiling of populin with milk of lime, and the precipitation of the benzoic acid by sesquichloride of iron, the excess of lime being removed by carbonic acid and the excess of iron by lime; the remaining liquid yielding salicin after evaporation. Piria's published statement reports the obtaining of 28.9 per cent of benzoic acid by this analysis, but I think that 33 per cent. can be obtained without any difficulty, all things pertinent being well done.

Another, and possibly a preferable method of conversion consists in heating populin with an alcoholic solution of ammonia to the boiling point. By this means the production of salicin is more prompt, although quantitatively deficient.

Salicin and benzoic acid may be combined to form an artificial populin, but I find that the product is lacking in purity if glucose is not added. The two substances being dissolved in alcohol, and the solution concentrated, the formed crystals consist of salicin and benzoic acid combined in such condition as to constitute crystals, which, although they have most of the characters of that salt, differ from pure populin very essentially. Although so alike we must not confound populin and benzol-salicin. The composition of the latter is $C_{13}$ $H_{17}$ ($C_7$ $H_5$ O) $O_7$, while populin is simply $C_{20}$ $H_{22}$ $O_8$.

For a moment consider the decomposition of salicin:

Salicin ($C_{13}$ $H_{18}$ $O_7$) + $O$ $H_2$ = $C_6$ $H_{12}$ $O_6$ (glucose) + $C_7$ $H_8$ $O_2$ (Saligenin).

The products of the decomposition of populin, comparatively stated, are as follows:

Populin $C_{20}$ $H_{22}$ $O_8$ + O $H_2$ = $C_7$ $H_6$ $O_2$ (Benzoic acid) + $C_7$ $H_6$ O (Saliretin) + $C_6$ $H_{12}$ $O_6$ (Glucose).

This chemical relation is, to say the least, suggestive, but although salicin and populin are so similarly constituted and so intimately related, salicin is not populin as a therapeutic agent, nor is populin identical in the same way with salicin. It will not be relevant to continue in our comparison; but in passing let me say that within a few years it has been found that other species of poplar besides P. tremula and P. tremuloides produce populin, and the populin of P. balsamifera is more like salacin and more readily converted into it than is the populin of the aspens.

Another comparison is more pleasing. Quinia and populin are not unlike. Both are inodorous and intensely bitter; both are unchanged by the action of air; both form salts with the readily crystallizable acids; both respond to similar tests; and the two powders are of semblant appearance. Populin's composition is $C_{20}$ $H_{22}$ $O_8$; the composition of quinine is $C_{40}$ $H_{24}$ $N_2$ $O_4$, or, according to Liebig, $C_{20}$ $H_{12}$ $NO_2$, representing a di-salt or a bi-salt.

The chemical substitution is therefore plain. Populin consists of just one-half of the carbon equivalents of quinine ($C_{20}$ to $C_{40}$); is twice as rich in oxygen ($O_8$ to $O_4$); nearly as rich in hydrogen ($H_{22}$ $H_{24}$); and deficient in nitrogen. Of these equivalents the last named is by no means of a radical value, and were it possible to separate it from quinine, the physical characters of that salt would not be essentially changed. If we consider the oxygen of quinine as of more value than the hydrogen it would, in case of an attempt at substitution, go far towards being compensant of the deficiency of the more valuable carbon. So if $C_{20}$ $H_{22}$ $O_8$ be set forth as substitutive of $C_{40}$ $H_{24}$ $N_2$ $O_4$, it simply represents a weakened quinine in carbon and nitrogen, and an over-strong quinine in hydrogen and oxygen. The compensation of equivalents would, therefore, be relative; and if we were to double the dosage of populin as compared to quinine, it would be not only equal in carbon value, but the super-excess of oxygen and hydrogen would prove it a place for the absent nitrogen. But practically we are not obliged to double the dose of populin to make it do the work of quinine. The latter salt finds in populin a regenerated quinine—if I may use the term—and it is a certain truth that populin shows itself to be quinine dispossessed of all base qualities and harmful action. We have sought in recent time past to find a method of ridding quinine of some of its objectionable features as a drug, and populin comes to our hand as a purified quinine in all, or nearly all, of the particulars in which it needs such purification. Thus it appears, in point of chemical composition, that populin comes nearer to being a perfect quinine than any other salt, not even excepting quinidia and cinchonia. What then remains to establish the claims of substitution? and what agent is more truly substitutive?

The subject being too lengthy for discussion in this article, I will leave further notice of it for another paper, in which I shall endeavor to show that populin, besides having other notable value, is truly a substitute for quinine.

## Science in Therapeutics.

By S. M. Curl, M. D., F. L. S., Rangitikei, New Zealand.

BEING fully convinced that the THERAPEUTIC GAZETTE is supplying a place in medical literature not filled by any other periodical, and that it

is likely to bring about a more efficient and a more certain mode of treating disease successfully, I venture to add a few further ideas to those printed in the GAZETTE of February 15th, 1882.

Any one who has been engaged in the active practice of medicine for the past twenty years, and has traveled so as to come in contact with the professors of the different schools of medicine and with the practitioners and physicians of different countries, and has kept up an acquaintance with what was being thought, written and published in the medical literature of the day, both in books and periodicals, must be convinced that not only have great changes taken place, but that these changes are leading to much greater certainty and precision in the treatment of all kinds of illness; while to the careful and diligent observer facts and knowledge are so rapidly accumulating that an exact acquaintance with the causes and conditions of diseased and abnormal states will soon be precisely understood.

Those who have kept up their study of pathology, and know what has been done for it by the microscopes and the chemistry of recent periods, will understand how much more accurate is the knowledge by these aids of diseased states and structures than that of even twenty years ago.

It is now possible to demonstrate not only that many of the diseases of the skin are caused by the invasion, growth, development and increase of various vegetative (e. g., ringworm) or animal (e. g., itch) parasites, but that these can be isolated and shown under the microscope, and their life-history studied thus; and what will destroy them when thus discovered is also known.

But in addition to these skin parasites there are demonstrated to be others that will invade the body of man as well as the lower animals, and produce anthrax-charbon-splenic fever, wool-sorters' disease, malignant pustule, or by whatever name it is known in different countries; the rinderpest, murrain, blackleg or other epizootic disease of cattle; and microscopists are now proving that most of the exanthematous diseases, as small-pox, sheep-pox, cow-pox, measles, scarlet fever, with diphtheria, and enteric or typhoid fever, have each their separate organism or parasite, that produces in its host the diseased conditions found there during its invasion and development. Chyluria, or the disease caused by the filaria, while taking up its residence in the blood of man during part of its life, is found during the remainder in the musquito. There is also the Bilharzia hæmatobia, which occasions hæmaturia; and again, the trichina spiralis, or flesh-worm, by whose multiplications and migrations most severe illness, often ending in death, is occasioned. Also the diseases known as leprosy are found to be accompanied by microscopic beings which have invaded the diseased tissues. In rabies (hydrophobia) various microscopists claim to have found specific small organisms. In syphilis and the enthetic diseases, species of microphytes are found to exist, and are believed to cause these diseases. In tubercular matter, whether from phthisis or scrofula, the microscope proves these smaller beings to exist, and these are probably the cause of such affections.

In ague and the intermittent fevers the microphyte that causes each has been isolated and exhibited. The vegetable sarcina ventriculi, while growing in the stomach, sets up the vomiting and other severe stomachic symptoms, which go on for years, until it is killed by creosote or sulphurous acid being taken as a medicine.

Erysipelas, hospital gangrene, puerperal fever and pyemia have each microscopic growths connected with them, and Professor Lister has, by his antiseptic treatment, shown how to guard against the invasion of these disease-breeding growths, while Professor Tyndal has demonstrated how they are always floating in the air, and ready to obtain an entrance.

It is not necessary to describe how many kinds of intestinal worms produce their ill effects in the several disorders to which they give rise, as these are well known. But it was not so well known twenty years ago how many lives could be saved in surgical and medical practice by using means to prevent the entrance of germs, or to ward off their ill effects and destroy them when they had gained admission. Thus, operations which were then mostly fatal, are not so now, and wounds opening the peritoneum which were so fatal as to be always dreaded by the surgeon are now not nearly so dangerous, by the anti-parasitical precautions used.

We are informed by competent authorities that not only is chicken-cholera (which is so fatal to poultry in France and elsewhere) occasioned by a bacillus but we are shown, also, that a somewhat similar minute being occasions Asiatic cholera in the human being. And, if hereafter, some investigator can by cultivation, in properly modified media, so change the intensity of the virus-germs of Asiatic cholera (as has been done by M. Pasteur in chicken-cholera) that they may be inoculated as a preventive of the intense action of unmodified Asiatic cholera virus-germs, then, thousands of lives may be annually saved in India and elsewhere.

In this direction, to the earnest physician, a magnificent field of usefulness may be opened out in the future when by the inoculation of modified virus-germs as much good may be done as has already been done in preventing the fatal effects of small-pox by modified virus-germs taken from the cow and inoculated into the human arm in the process known as vaccination.

But leaving these diseases that the microscope has shown to be accompanied by microphytes or other small parasites which in other ways have been proved capable of producing disease, we next learn from chemical research how many and serious are the diseases occasioned by abnormal, or altered chemical conditions in separate organs, and in the blood, the bile, the lymph, the urine and the body generally. Diabetes, glycosuria, gravel, stone, dyspepsia, gout, rheumatism, leucocythæmia, in its two varieties, splenic and lymphatic (of Virchow), chlorosis, anæmia, gall-stones, albumenoid, waxy, lardaceous, amyloid or fatty degeneration of different tissues and organs, scurvy, rickets, mollities ossium, pellagra and many others, are occasioned by some definite chemical change in the solids or fluids leading afterwards to the altered states known by the above names.

Then there are all the numerous unhealthy states occasioned by alterations in the nerves,

ganglions, spinal cord, or brain, either organic or functional, many forms of madness, vesania, or dementia, mania, melancholia, hypochondriasis, delirium tremens, hysteria, epilepsy, catalepsy, paralysis, locomotor ataxy, and many forms of cephalalgia, and of inflammation with many resultant lesions, as softening, induration, atrophy, and all the forms of altered sensation from nerve change, as tic douloureux, sciatica and neuralgia in many parts, or anæsthesia, palsy, cholera, tetanus, as well as many others from disordered action of the nerves.

Again, there are the diseases arising from excess or deficiency of cell-growth or development, as scirrhus, cephalonia, or other forms of carcinoma, sarcoma, melanosis, epithelioma, fibroma, fungus hæmatodes and all the other malignant and non-malignant growths. In addition to which there are the wasting and other diseases, where the cells are neither produced in the quantity or quality of normal health, thus leading to atrophy and degeneration, premature decay and early death.

All these matters have been recently much studied, and made clear by the most advanced pathologists, while physiologists have investigated and described what the normal acts and functions of the organism are in a state of health, but here the matter has been allowed to rest without that advance being made in therapeutics which students and the public have a right to expect from the professors of the medical profession. Here, in a knowledge of the actions of the materia medica and in rational therapeutics, there is as much vagueness and uncertainty—taking the mass of medical practitioners of all countries—as there was thousands of years ago, when the Egyptian, Babylonian and Chinese medical men wrote and gave medicines. Witness such writings as have come down to us and have been deciphered for our information by the scholars who have translated them. For we there learn that a preparation of a plant or mineral was recommended and given for a certain set of symptoms or complaints, just the same as at the present time. A list of medicines were then recommended and given as narcotics, as cathartics, as emetics, as alteratives, as tonics, as pain-removers, as appetite-givers and in much the same way as they are at the present time, many of them often jumbled up together and introduced and left to fight together with the complaint, in the dark, and chance the result.

That this was the way in those ancient times is not to be wondered at, but that at the present time it is the same, is a sad reproach to all concerned. When we know that there are many otherwise great physicians, who, in face of a grave case of illness, fold their hands and stand helplessly looking on, trusting to nursing and the "expectant" method, being afraid to prescribe medicines, as the results to their prescribing are so uncertain, is not a very edifying spectacle to medical students, nor very satisfactory for the relations, or indeed, for the sufferers themselves.

It is not the fault of the chemists or pharmacists, for while such firms as Parke, Davis & Co. have spent thousands of pounds, and brought energy, labor and skill to procure all sorts of medicines, and present them in the greatest purity and of the most unvarying character, there is no difficulty in choosing medicinal agents that will act upon the diseased states spoken of above, and alter them so that healthy action is again established.

And, now, that the THERAPEUTIC GAZETTE has set itself the very laudable task of giving therapeutics their proper place in the treatment of the sick and in the practice of medicine, we may hope that the remedies being provided by the skilled pharmaceutical chemist, and the physiologist and pathologist having demonstrated what are the normal and what the abnormal conditions of health and disease, the physician, too, having made himself acquainted thoroughly with this knowledge will, by obtaining these remedies, be able so to apply them that he shall cure his patients when they apply to him for aid. And when this is done, then we shall find that homœopathy, hydropathy, the sun-cure, the movement-cure, and many other such cures and advertised nostrums will all be dismissed to that limbo where have gone before the elixir vitæ, the philosopher's stone, the san grail, witches, astrologers, magicians and other such things.

Once let the physician of the future see that, like the skilled civil or military engineer, or the astronomer, or the architect, or the mechanician, or the electrician, or the chemist, that he must understand fully, if he is to succeed in his profession, all about the machine, or structure, or body he is to be called upon to deal with. No partial knowledge will do, he must thoroughly comprehend all its usual and unusual actions before he can possibly undertake to deal with it or alter these actions. Then he will come to the problem, what is to be done for the best, and he will be prepared to act with such precision as will enable him to choose those medicines whose action he knows will bring about the exact result he requires to produce. There will be no expectant waiting here, any more than there would be with the skilled mechanic or architect called upon to repair a machine or edifice.

While the physician knows a good deal about physiology and pathology, and but very little about the modus operandi of the materia medica or therapeutics, of course he is wise to carry out the expectant treatment, and not do harm by giving medicines that he knows very little about, and which he may thus do mischief with if he gives them; and if he is very little acquainted with physiology and pathology, he may do still more harm if he "prescribes for symptoms," without knowing what has produced them, or if he cannot correctly diagnose the disease of which they are the expression and results.

But leaving for the present those diseases that are now not necessarily or even generally fatal, there are still, unfortunately, many others which when once they attack the body, are generally of long continuance, although sometimes they are speedily fatal; of such are rabies, hydrophobia and tetanus, the many forms of cancer, phthisis, puerperal fever, glanders, the virus of snake-bites, epilepsia, enteric fever, and the exanthematous fevers. For these remedies are required which, if given, will destroy the virus or remove the cause of these affections. And here a great field of usefulness is opened to the contributors of the THERA-

PEUTIC GAZETTE. If each will contribute to the THERAPEUTIC GAZETTE all such plans of treatment as he knows of, has read of in all countries, or has used in his own practice with success, giving, of course, the exact details, it will probably lead to an advance in relieving and curing complaints that are now intractable or fatal. And if the learned editors of the GAZETTE will assist by setting aside a portion of the Journal for registering such advances in treating these hitherto intractable affections, it would soon become a special feature in the GAZETTE, and cause it to circulate, not only amongst its present readers, but everywhere that medicine was studied and new medicines and improved methods of cure were desired.

There is nothing essentially incurable, in either the unhealthy production of cells like cancer or other malignant diseases, or the introduced virus-germs, that should prevent a mode of treatment being adopted that would put a stop to these diseases, and cure the patient. Dr. Clay claims to have relieved and benefitted cancer cases by the administration of chio resin (ext. pistacia terebinthus); others claim to have caused the disappearance of the cancerous mass by electricity, and by various other means, and although the experience of the mass of the profession has not been so successful in these cases, there may be many reasons for this that may be quite explainable and worthy to be known; and it would be well to learn through the pages of the GAZETTE all about this, as I am satisfied by my own observations that Dr. Clay's remedy has caused the terrible pains of cancer to disappear, and the diseased mass to diminish in size, the enlarged glands to be no longer seen, and the patient to get rest and nourishment, to regain strength and increased health while under this remedy. But as I am still studying this subject, I await a wider experience and fuller trial than the few cases in which it has done good, before publishing and giving the necessary details.

The same applies to aneurism of the ascending and descending aorta in which I have found Parke, Davis & Co.'s fl. ext. ergota, in combination with other appropriate treatment, cause the enlarged vessels so to contract that the aneurism was arrested and caused to solidify and get smaller, so that in one case, where four medical men had told the patient of his imminent danger, he has since for two years recovered and been engaged in his usual business without discomfort. But as I merely notice these cases, usually incurable by medicine, to show that there is a wide field for the GAZETTE in which, if the energetic editors will draw out the uses of new or improved methods of treatment in diseases hitherto not easily cured, much good may result to sufferers, and more certainly to practitioners.

For as we are now able to choose the appropriate anæsthetic chloroform, ether, or any of the others to operate without pain to the patient, and can give chloral hydrate to produce sleep, or bromide of potash, or other bromide to reduce nervous excitement, or injecting morphine or its salts subcutaneously we can relieve pain, etc., or by administering strychnine can set up increased nerve and muscular action amounting even to tetanus, and by the use of calabar bean or its extract or al ralaul, we can put an end to tetanus, either traumatic or from strychnine, and whereas we have in woorari, muxarine, atropine, aconitine, digitaline, nicotine and other active remedies, the means of exalting or lowering the action of the nerves and other tissues at the present which were not so perfectly known twenty years ago, it is certain that not only may still further knowledge be obtained in the next ten years, but the science of therapeutics should by that time have taken a very different position to that it now holds; and as electricity is now being more studied and used in other pursuits, it is to be hoped that some physicians will make themselves acquainted with how it may be more beneficially employed for their patients than at present, while the inhalation of oxygen and its greater or lessened introduction into diseased tissues may yet solve the means of dealing with bacteria, bacilli, micrococci, and other germs doing harm by multiplying within the patient's body, and increased attention to atmospheric pressure, solar light, heat, moisture, electric change of the surrounding air, with actinic and chemical rays therein, thus using ozone, nitric acid and other agents also present. When these things are better understood they may all be made use of, together with passive movement of muscle, massage, friction and numerous other means now little attended to by the general practitioner, but left to others not so worthy of the confidence of patients.

All these modes of treatment, and many others, must in the future be made to fall into their proper places in the treatment of disease, if that treatment is ever to be as perfect as it should be. But in the meantime let medicines take their proper place, and let their active principles be applied with a more certain knowledge of what they are to accomplish, so that therapeutics may be a more exact study than at present—so that, instead of the uncertainty regarding it which now prevails, it may be made to take its true place as an exact science.

## Railroad Surgery.

By J. W. Trader, M. D., Sedalia, Mo.

LONG before the days of railroad surgery, we had similar injuries which were treated on general principles.

I do not know that we can promise anything new in this department of surgery that will not apply with the same propriety to the general treatment of surgical diseases and mechanical lesions.

As a class, railroad injuries assume a gravity, however, that is not likely to obtain in injuries incurred in the ordinary avocations of life.

Taking fractures as an example, instead of meeting with simple lesions of bone, we are apt to have the soft tissues involved as well, and this not in the form of what is generally known under the head of compound fractures, but compound and comminuted fractures embracing osseous and soft tissues alike in one common ruin.

The extremities—arms and legs, feet and hands, and notably the feet and hands—furnish the bulk of cases requiring surgical interference, for beyond that injuries extending to the trunk are generally of so serious a nature as to be beyond surgical skill, or so trivial as to need very little attention.

Another rule might with propriety be suggested in regard to the management of railroad injuries in common with other mechanical lesions, namely, the processes of conservative surgery.

Notwithstanding the apparent gravity of extensive lacerations, contusions and mutilations of the soft parts, restoration will often take place by the judicious application of conservative means alone. The maxim governing the fathers of surgery, from the time of its revival in the seventeenth century up to the beginning of the nineteenth, was that operative procedure as must be a necessity. The French surgeons were the first to introduce the term *operations de complaisances*, and whether they as a rule practiced it or not, certain it is that this operative surgery, simply to please either the patient or the operator, obtained quite a notoriety.

Injuries to the soft parts, even where extensive lacerations are present, may yield to the plastic power of nature and be restored to usefulness without any further surgical interference.

Crushed bones, however, especially in the vicinity of joints, are much more refractory and, as a rule, require to be cut away, or they necessarily must slough away before the injury can be properly healed. Where vessels and nerves are intact, much may be depended upon natural processes for restoration.

This should be our first inquiry: It makes no difference how bad apparently the injury may appear, have we a complete system of vessels and nerves? If we have, we can calculate with a great degree of certainty that the ablation of members will not be necessary. The hands will stand greater violence, probably, than the feet but in our diagnosis, and especially in the prognosis, we should be careful to note the condition of the circulatory system.

Probably a better way to impress this subject upon your minds would be to give you a few hypothetical cases. Suppose, then, for instance, that you are summoned to attend a recent wreck. From what information you are able to obtain, while en route to the disaster you are lead to believe that you are to meet with some very serious injuries. The first case you examine is lying prone upon a matress, or probably on the floor of the car, and does not manifest any very great suffering. There is a general pallor of the whole surface. The face is white, and the eyes have a restless wandering. The first question you should ask (and which all good doctors generally ask), is to see the tongue. You will likely see a bleached condition of the tongue. Next, place your finger upon the pulse. There is a flickering beating of the pulse; questions are answered with hesitancy. You next examine the seat of complained-of injury. You find a fractured leg, likely lower third, and injured foot. The skin is not broken, but has a bluish ecchymosed appearance. Your first impression is, if you have had but little experience in this class of injuries, that your patient has a simple fracture and you may be injudicious enough to so express yourself. But now take hold of the foot firmly with one hand and grasp the limb at the same time above the seat of injury with the other and gently rotate; at the same time squeeze the foot in your hand, and you will see and feel at once that you have a case of comminuted fracture of bone, with no laceration of the skin, but evidently a complete destruction of soft parts, nerves, vessels, etc. Your only remedy is immediate amputation. Just as soon as you can detect a disposition to reaction and a return of the circulation, operate.

Take another case. This patient is writhing in pain. You find the flesh lacerated and torn, the pulse bounding. The rent extends from the ankle to the great toe, and through both skin and fascia. In passing your finger through the injury you find fracture of metatarsal bones, wound bleeding, arteries pulsating. There is also fracture of both tibia and fibula at their inferior third. To all external appearances this is a case of greater gravity than the preceding. But experience will soon teach you that this case will yield good results to conservative surgery, and will come out with a good and useful limb. Then, again, here is a case of a man who seems in great agony. Upon stripping the body you cannot discover any lesion externally. The pulse is very feeble. The patient complains of intolerable pain in the back and thighs. Examine the spinal column; no apparent lesion there. Flex the legs; no fracture there. Ask the patient if he does not want to make water; he will tell you that he can't. Upon introducing the catheter, you draw off a few drops of bloody urine. Pain in abdomen soon manifests itself. This is a case of internal injury, with probably rupture of bladder and fracture of the pelvis, and is necessarily fatal. Then, again, here is a man picked up by the side of the wreck, who is perfectly insensible, breathing quietly, possibly slight oozing of blood from the ears; pulse compressed and slow; no vomiting; can move his limbs. This is a case of concussion, with compression of brain and fracture of the base of the skull, and will likely get well if you keep the doctors away from him.

We have given here what is presumably injuries of gravity in railroad surgery and we will now briefly notice the plans of treatment best adapted to meet the indications in each case.

The first case, after an interval of an hour or so, now manifests some uneasiness. The pulse is evidently returning. Place the patient prone upon the operating boards. Loosen all the articles of clothing, and have your assistant administer pure chloroform from the towel cone, being cautious about strangling with the strong vapor or producing any unnecessary shock (and here I must urge, parenthetically, the necessity of using chloroform alone, and not too fast, it is the safest and best anæsthetic known to the profession and must stand at the head of the list in all surgical procedures). As soon as the patient is insensible apply the tourniquet (Esmarch's bandage if you prefer it), and amputate as near the seat of injury as possible to procure good flaps. Make fast the arteries, stitch the flaps snugly together and instead of roller bandages discard all binding applications. Use strips of cheese cloth three inches wide and sixteen inches long, woven in a kind of basket web over the limb, after first saturating them in a solution of carbolized water of the strength

of one ounce to eight ounces of hot water. Now, if convenient, encase the limb in the same carbolized water at the temperature of 90° and your work is done.

This, in theory, is the Lister mode of dressing, but practically far superior. All the sponges, as well as the hands and instruments of the operator, should be dipped often in this warm carbolized water during the operation, and the stump and inside of the flaps well sponged with the same solution before the flaps are stitched together. So far as medication is concerned, you should be very cautious in the administration of morphine unless reaction runs high. You may unnecessarily oppress the heart and further paralyze its efforts to restore the natural powers of life.

In the second case you have an entirely different set of indications to meet. While the system undoubtedly received a terrific shock it bounded from it in an instant and excitement now runs high. After satisfying yourself of the extent of injury, you dress the foot the same way in which you did the amputated stump, rely upon position in the treatment of the fracture, give your patient a hypodermic injection of half grain of morphine and let him rest. In the case of severe internal injury, when great suffering manifests itself, use morphine hypodermically but more sparingly.

In concussion with compression, and probably fracture at the base of the skull, I told you that the case would likely get well if you kept the doctors away from him. I did not speak in irony. When the surgeon informs the friends that the patient must be kept quiet and no attempt to give medicine or anything except a spoonful of water at short intervals, if the patient can swallow, you are generally asked if he cannot do something more, and if you inform them that you cannot at present and refuse to accede to the clamor of the friends, you are very apt to find yourself superceded by from two to four doctors who happen to know just how the thing is done and who succeed in a remarkably short space of time, after a vigorous use of the Davidson syringe and mustard plasters, in effectually quieting the patient as well as the clamor of misguided friends.

The cases detailed above are not imaginary ones, but give an epitome of what actually occurs in the great majority of railroad injuries.

Little else need be added to impress upon you the fact that conservative surgery has no better or more extensive field for gaining victories than in the one under discussion, and the maxim of the revivers of surgery is as applicable here as any where in the domain of surgical procedure, viz., never operate unless there exist an absolute necessity.

## Damiana and Chaulmoogra Oil.

By Wm. Fahy, M. D., Oxford, Miss.

FOUR months ago I was called to treat a case of "rheumatism complicated with liver complaint and complex derangement of the urinary and respiratory organs," at least this was the diagnosis of that peripatetic genius and thaumaturgist, Hamblin's "Wizard Oil" man, who traveled through this section some time ago, in a brilliantly decorated car, drawn by four Norwegian horses, which contained not only a bountiful stock of the Wizard Oil, but also three melodious warblers, who daily and nightly sang sweet Ethiopian and Hibernian melodies to the accompaniment of a wheezy accordeon and a cracked melodeon. The only thing needed to complete the imposing tableaux was the presence of that learned defender of quack nostrums, and their millionaire proprietors, Dr. Bigelow, of Washington, D. C.,—Washington, that great centre of the genius, eloquence, and—and—well residing place of Dr. Bigelow—to give it the capping climax of nostrum vending enterprise. Well, the "Wizard Oil" man was called to see the case, and after extolling the wonderful efficacy of his nostrum, diagnosed as I have stated, and after lubricating the patient thoroughly, left the family in the seventh heaven of hopefulness and several dollars minus, for divers bottles of the wondrous oil. As the patient got worse, instead of better, as a dernier resort the regular physician was called in and found not "rheumatiz," but a very decided case of "paraplegia." As I am writing of the therapeutic effects of the damiana and chaulmoogra oil in this particular case, it may not be inappropriate to refer to my case book and copy.

Diagnosis of the case of Millard Kennedy, æt. 21.

Paraplegia—spina ventosa—pressure over the psoas muscle causes pain—indication of psoas abscess: Prognosis—danger of a coup de sang of the lumbar plexus. A pressure of the finger from the last dorsal and the superior lumbar vertebra to the trochanter of the os femoris indicated psoitis, and probably femoro coxalgia—complete paraplegia below the seat of disease. Spermatorrhœa—emissions frequent and entirely uncontrollable. Brain force—weak to the verge of vacuity. Pulse—feeble, thready, variable. Temperature—low. Appetite—none; food when offered rejected with signs of disgust. Pain on pressure over the hypochondriac and iliac regions. Splenic symptoms, but liver, heart and kidneys normal, save from sympathetic action.

Now, here was a case wherein I thought a powerful nerve tonic and aphrodisiac combined would be efficacious in restoring vitality. Something was also requisite to restore lost tonicity to the stomach. What will I exhibit? The bromides, ergot, strychnia, zinc—and—Wizard Oil!! had been resorted to in vain. I determined, as a test, to confine myself strictly to damiana and chaulmoogra oil—and now before I proceed further, let me state that I simply wished to build up first with these medicants and then attack the primary disease when nature wasn't able to stand the assault—this in the latter end would be more within the province of surgery than medicine. Therefore I do not wish to be understood that the two remedies are panaceæ, but I do claim that in this case they were wonderfully efficacious in building up and giving tone and vitality to a system so shattered by spinal disease that to raise it from its devitalized condition was, to use the expression of the young man's sister, a highly accomplished and intelligent lady, "like raising the dead." I feel myself in duty bound to note this case, not only for the benefit of my brother physicians, but also for the general public, for no mat-

ter what the teachings of the "Old School," the nineteenth century "Regulars" must fall into the wake of the "Free Eclectics" and scorn none of the "New Remedies" found in Nature's vast medicarium, whether such remedies were accidentally found by the Hottentot of Africa, or through years of practical experience and severe chemical tests by the learned physicians of Europe and America. I knew an old lady in Calhoun County who told me one day that she could beat all the doctors living by a very simple remedy which she had used in her family for 30 years. "And what is that, my dear madam?" I enquired. "Biled water; thar aint nothin' that comes up to biled water drank cold," she replied. I thought of Dr. Physic and his "Lye Tea" and I knew there was virtue even in "biled water drank cold," when used in its proper place. The place for Damiana and Chaulmoogra Oil is in the U. S. Dispensatory, and before many more editions are published they will be found there officinally—mark that! Willard Kennedy's case is still in my hands, the Damiana and Chaulmoogra oil, beyond a doubt, have given him not only nerve force so that the paraplegic symptoms are fast disappearing, he eats heartily, the anæmic condition is changed to a fairly healthy one, he can move his arms and almost raise himself in the bed, his brain power is normal, and I think after I have performed an operation to relieve the psoas muscle of pus, which has evidently gathered in that vicinity, a complete cure will be effected. But I do not think I could have given him the vitality necessary to stand the operation, trifling as it is, without reconstructive medicines of superior virtues, as the Damiana and Chaulmoogra oil evidently are.

## Therapeutic Notes.

By William A. Caveness, M. D., Jacksonville, Texas.

RHUS AROMATICA was used in an obstinate case of enuresis, with very beneficial results It is better than anything I have ever used for this annoying complaint, judging from this one case.

Damiana is a valuable nerve tonic; is diuretic has no direct action as an aphrodisiac, and in respect to this last, am inclined to rank it below phosphorus.

So far as tried, lippia Mexicana has proven an incomparable remedy for irritated bronchial mucous membrane. This is saying a great deal, but I believe it.

Used with fine effect fl. ext. corn silk in a case of torpid kidneys, caused probably by malarial poisoning. Think this would be valuable in cases of malarial hæmaturia.

Gave quebracho a fair trial in my own case. Found it to be a stimulant, and therefore did harm. In cases of dyspnœa, where a stimulating effect is desired, it is doubtless valuable; in other cases useless.

Have used grindelia robusta in form of pills and fluid extract, and each has been satisfactory. This remedy has a deservedly great reputation in the treatment of asthma, and though it is not a specific for that disease, it is better than any other known remedy. Knowing the constipating qualities of the grindelia robusta, I prescribed the pills, in almost a fit of desperation, for a case of inflammatory rheumatism, in which the acuteness of that disease had given way and typhoid symptoms had presented themselves. The bowels seemed uncontrollable. Various vegetable and mineral astringents had been used, including that "old stand by," opium and lead. Ordered one pill in connection with latter every four hours. In 24 hours bowels controlled. Omitted pills. In two days bowels again became loose. Wishing to know if the grindelia did the work before, opium and lead alone was again prescribed for 24 hours, with but little benefit, when the pills were again ordered with result as before. Since then have used the pills, in connection with other remedies, very advantageously in several cases of dysentery; and in one case of diarrhœa no other astringent was used. This remedy seems to have an alterative effect on the mucous membranes in addition to its anodyne and constipating qualities; and these properties should recommend its use in bowel complaints.

A case of chronic eczema was cured by using cascara amarga and folia caroba three times a day for about six weeks, the local treatment being fl. ext. grindelia squarrosa ʒ i, glycerine ʒ vi, applied twice a day after having the scabs loosened with carbolated oil. A more recent case was treated same way with same result. The fol. caroba and casc. amarga both seem to be fine alteratives.

Fluid extract coca ℥ iv, was given to an old morphine eater. His report is, he "had just as well have taken that much water."

Cascara sagrada has scarcely come up to my expectations, though for constipation alone it is probably the best remedy we have. Combined with berberis aquifolium it is certainly the best remedy for constipation of females. The berberis compound pills of P., D. & Co. unite the properties of the two medicines, and is at once a most elegant and useful remedy in many cases. Am well pleased with effects of berberis aquifolium.

The viburnum prunifolium I have used for a long while in form of a strong infusion. Have used it in both pregnant and non-pregnant cases, and have never been disappointed in its use.

## Translations.

[This department is devoted to translations from our foreign exchanges, and will embrace articles from some of the best German, French, Spanish, and Italian writers. The articles marked with the initials P. P. G., are translated by P. P. Gilmartin, M. D., of Detroit.]

### Oil of Turpentine in Small Doses.

The Journal de Therapeutique, of Paris, in its March issue of this year, publishes an interesting review of an essay upon the therapeutic properties of oil of turpentine in small doses, by Dr. Ingigliardi.

Taken in small doses frequently repeated, oil of turpentine, according to this observer, causes slight cerebral disturbance, and is followed by decidedly favorable results, especially in cases of collapse, the coma of sun-stroke, the adynamic condition of cholera, and of infectious fevers.

It affects markedly the spinal cord, the medulla oblongata and the motor nerves, and excites energetic contractions in certain muscular organs, such as the heart and the uterus. The calibre of the blood vessels is diminished by its action, and its hemostatic influence in pulmonary as well as vesical and uterine hemorrhage is thus explained.

It is a very valuable means, also, of controlling reflex action in certain neuroses, like asthma, tetanus and epilepsy; it is possible, too, that it would be of service in the transitory mania of alcoholism.

On account of its effect upon the brain, it is an inestimable palliative in the agonising pains of rheumatic neuralgia, sciatica, tic douloureux, and idiopathic visceral forms of neuralgia. Its sedative power, moreover, in the cephalalgia of anæmic women is pointed out and its favorable action attributed to stimulating the circulation of blood in the brain.

Oil of turpentine acts, again, upon the vasomotor nerves, and consequently upon the circulatory system, with special tonic influence upon the mucous membranes, diminishing and modifying the catarrhal secretions of the respiratory, digestive and urinary tracts.

It can be used with advantage in dropsies where there is no inflammation of the kidneys present, because it provokes this organ to greater activity and relieves its torpid condition. In like manner, every variety of œdema has been benefitted by it, as well as hydrothorax and ascites.

Oil of turpentine, in fine, possesses, according to this author, specific anti-spasmodic, anti-catarrhal, hemostatic and antiseptic properties. It should be administered in weak doses, not exceeding 50 centigrammes to 1 gramme a day, either before or immediately after meals.

Its efficacy in the painful paroxysms of persons suffering from tabes is also noted by Dr. Ingigliardi. P. P. G.

---

[Translated by R. D'Ary, M. D., Romeo, Mich.]

### Convallariæ Majalis Flores.

Dr. Kalmyk of has tried the tincture of convallaria majalis flowers in the strength of ʒ i to ʒ vi of menstruum on five subjects, of which he closely observed three. One was a case of insufficiency of the mitral valves and cirrhosis of the liver in a woman 24 years old. The second patient was a man suffering similarly. The third also was a man suffering from chronic nephritis. The results obtained are summarized thus: 1. The heart's action becomes more quiet and energetic, the pulse becomes even, full and slower, the dyspnœa disappears. The remedy does not seem to have any injurious influence on the heart. Two of the patients had taken altogether eleven drachms, without harm. 2. The quantity of urine is promptly and very much increased, the dropsical effusion disappearing very rapidly. The maximum of increase of the urine was 2,250 cubic centimeters in the case of nephritis, and in the other two, 1,700 and 2,000 cc. in each. The effect of the remedy in ascites was, in the doctor's experience, also satisfactory.—*Vratch.*

## Correspondence.

### Chemical Constitution of Jamaica Dogwood.

We take pleasure in inserting the following communication:

ANN ARBOR, June 25, 1882.

To the Editors of the THERAPEUTIC GAZETTE:

DEAR SIRS:—Having completed the analysis of Jamaica Dogwood, I herewith give you my results. I followed the scheme set forth by Henry B. Parsons:

ESTIMATION OF MOISTURE.

Moisture volatile at 100° 120°C..... 11.225

Some of this loss is counted as volatile oil.

ESTIMATION OF TOTAL ASH.

Total ash..... 14.3

Amount of ash solution in water..... 6.93

This water solution contained chloride and sulphate of potassium.

Amount of ash insoluble in water solution in dil. H Cl..... 80.06

This hydro-chloric acid solution contained calcium phosphate, traces of calcium sulphate, magnesium phosphate and iron.

Amount of ash insoluble in H Cl. and 20 per cent Na. O H sol..... 12.97

The amount insoluble in hydro-chloric acid and a 20 per cent. solution of sodium hydrate was counted as sand, etc.

ESTIMATION OF BENZOLE EXTRACT.

Total extract..... 4.804

Amount lost drying at 100°C (volatile oil). .21

Amount soluble in water..... .29

Amount soluble in hydro-chloric acid..... 16.7

This acid solution contained a glucoside. This was determined by its reaction with Fehling's solution.

Amount soluble in 80 per cent. alcohol.... 41.21

This contained chlorophyll and rosin.

Amount insoluble in 80 per cent. alcohol.. 38.59

The amount insoluble in 80 per cent. alcohol consisted of a brown waxy substance.

ESTIMATION OF 80 PER CENT. ALCOHOL EXTRACT.

Total extract..... 18.2

Amount of ash..... 9.2

Amount soluble in 95 per cent. alcohol... 62.

Amount insoluble in 95 per cent. alcohol.. 38.

In this alcoholic extract I found an alkaloid. I got abundant precipitates with solution of iodine in potassium iodide, potassio mercuric iodide and molybdic acid which was reduced to the blue molybdate. I then extracted the drug with alcohol acidified with hydrochloric acid. I again tested this extract with the alkaloidal reageants and verified the results given above. This extract was also precipitated with amonia.

ESTIMATION OF WATER EXTRACT.

Total water extract..... 23.6

Amount of ash..... 8.4

This extract consisted of a brown gummy material.

I found no tannic or gallic acid in the plant. I intended to separate and identify the alkaloid, but the time was too short. I was put back four days in my work by the breaking of a flask. Parson in his scheme makes three more estimations, namely, estimation of starch isomers, alkali extract and cellulose. I did not have time to do these, however. Am much obliged to you for sending the drug. Yours respectfully,

WM. HEIM.

### Notes on the New York "Code"--Jamaica Dogwood, Berberis Aquifolium and Cascara Sagrada.

Our great Empire State has received a great deal of attention since the February meeting of the State Medical Society. The cause of this extra notice on the part of the sister States was the radical change in our code of medical ethics, by which regular practitioners were allowed to meet in consultation any and every one possessing the right to practice, according to the medical act of May, 1880. That act is virtually a dead letter. A man of my acquaintance in the central part of this State commenced practice with one of Buchanan's diplomas, and when the registration act was passed he registered, and has kept right on with his practice. In brief, that act recognizes the regular physician, the dealer in the little pill, the eclectic, the cold water man, and in fact everybody who could procure some document to register under, as being on one and the same level.

Now, the State Society goes a little further and "lets down the bars" of professional honor and integrity, and invites all of these different classes to shelter under its spreading and "liberal" wings. It is a surrender on the part of the State Society. No one would embrace a snake! Yet the State Society says, I endorse the man who puts two drops of aconite root into ninety-eight of diluted alcohol, and dispenses one drop of that to four ounces of water, with a dose of one teaspoonful three times a day!

One of the gentlemen who was on the committee on Revision of the Code, at the State Society, said in public recently in my presence, that it was proposed on the part of the committee to try the present arrangement one year, and if at the end of that time it was thought best to change it, it could then be acted upon. It is to be hoped that it will be changed. The profession in this section do not approve of the present code. It does not meet the approbation of the great body of physicians in this State, as far as known, with the possible exception of New York and Brooklyn. Do not censure us all, please.

My experience with Jamaica dogwood and berberis aquifolium has been quite satisfactory. They have done nearly all I could expect in fulfilling the indications for their use. Nitro-glycerine combined with Fowler's solution worked very nicely in a case of angina pectoris. In regard to cascara sagrada, I have been thus far unable to verify the claims set up for it. Perhaps New York State constipation is more obstinate than that found elsewhere. The opposite would be expected now since the new code was adopted.

F. W. PUTNAM, M. D.

Binghamton, N. Y., March 25, 1882.

---

### A System of Gynæcology by American Authors.

DEAR SIR:—Will you kindly call the attention of the readers of your journal to the proposition which I am about to make?

A "System of Gynæcology by American Authors" is in process of preparation, and it is intended that this shall be as nearly encyclopædic as possible.

To me has been allotted the task of writing the chapter on the "History and Statistics of Ovariotomy." To obtain complete statistics of all ovariotomies done in three-quarters of a century of the history of the operation, is a task quite impossible, as many of the early ovariotomists are dead and their records lost. Even among the living many may be disinclined to co-operate with me, as they should. Although the report of each operator's cases may cost him some time and trouble, you will readily see what a valuable fund of information will be obtained by the collation and arrangement of all the facts to be gained.

It is desirable, too, to have all material ready for the press by the end of this year,—so that the sooner the returns are made, the lighter will be the task of the editor. Please request all who wish their cases published, to send me the reports before Sept. 1, prox.

May I request your earnest co-operation in the matter, that the work may be worthy the great subject in hand?

The questions to be answered are as follows:

1. Name of Operator?
2. Age of Patient?
3. Nationality?
4. Married or single?
5. Aspiration or previous tapping?
6. Duration of growth?
7. Laparotomy or vaginal Operation?
8. Condition of patient at time of Operation?
9. Were antiseptic precautions used?
10. Was the spray used?
11. Long or short incision?
12. Adhesions or other complications?
13. Double or single Ovariotomy?
14. Pathological features of Cyst?
15. Treatment of the Pedicle?
16. With or without Drainage?
17. Duration of Operation?
18. Complicated or Uncomplicated history after Operation?
19. Anti-Pyretics used, if any?
20. Result. Cause of death, if any?
21. Primary or secondary operation?

Let the answers be as concise as possible. In many cases a simple yes or no will suffice.

Will you kindly assist in giving the greatest publicity possible to this notice, and publish it for a sufficient length of time in your journal? Blanks, containing lists of the questions referred to, will be sent to any address.

All communications should be addressed to me at 191 Madison Avenue.

J. E. JANVRIN.

NEW YORK, May 1, 1882.

---

### A Practical Point in the Use of Nitro-Glycerine Pills.

DEAR SIRS:—I have been prescribing nitro-glycerine in the form of pills (1-50 grain) in a case of angina pectoris, but did not get the characteristic effect of the drug upon the circulation, until I advised my patient to chew the pill before swallowing it, when the effect of the drug manifested itself at once. My knowledge of this point in practice was obtained from the London Lancet, and thinking that it might be new to many of your readers, I take the liberty of calling their attention to it through the medium of your valuable journal.

J. W. CLERNSHA, M. D.

PORT HOPE, Canada, June, 15 1882.

# The Therapeutic Gazette

WM. BRODIE, M. D, Editor.

F. E. STEWART, Ph, G., M. D., Associate Editor.

DETROIT, MICH., JULY 15, 1882.

GEO. S. DAVIS, Medical Publisher, Box 641.

SUBSCRIPTION PRICE, - - ONE DOLLAR.

PRICE OF BACK NUMBERS:

SINGLE COPIES, EACH.....$ .10

(Vol. II., No. 1, is now out of print.)

BOUND VOLUMES.

| | | |
|---|---|---|
| VOLS. I. & II. (QUARTERLY), | PAPER COVER, EACH | .40 |
| " " " | BOARD " " | .75 |
| VOLS. III. & IV. (MONTHLY), | PAPER COVER, EACH | 1.00 |
| " " " | CLOTH " " | 1.50 |

POSTAGE EXTRA.


## The Therapeutics of Venesection.

IT was intimated by a certain wise man of old that that which is has been, and that there is nothing new under the sun. While modern research has thrown much doubt on the literal correctness of these statements it has, nevertheless, but served to establish more firmly the fact that there is in it a substratum of sound philosophical truth. Much of our knowledge, like our fashions, progresses in a circle. It has frequently happened after the display of much energy in the line of research and experiment, that the plodding worker has come around to something which had been known before, but which had been lost and forgotten.

The science of therapeutics furnishes comparatively few illustrations of the fact above noted, but still an occasional one presents itself, and among these we may, with good reason, class venesection. The memory of the older men of the profession carries them back to the time when venesection occupied a position of great, though waning importance on the list of therapeutic procedures, and when, to visit a patient without being fortified with a thumb lancet would have been an unusual if not an unpardonable oversight. Not long, however, after these older practitioners of to-day threw themselves on suffering communities for support, the great change in regard to the necessity of blood-letting which for years had been slowly taking place, was consummated. So great was this change, which has continued even to the present day, that practitioners may be found in abundance who have braved the stormy nights and the other hardships of twenty years, and who have never punctured the median cephalic. Various causes have been assigned for this discontinuance of blood-letting, and among them the older practitioners who bled in their younger days give preference to the alleged change in the type of disease since the days of their youth. Doubtless more modern habits, of life etc., have had some influence in giving diseases a more asthenic tendency than of yore, but it is much more probable that the almost absolute disuse of the lancet is due rather to imperious fashion.

Of late years there have been evidences of an approaching renaissance of the obsolete practice, and it is barely possible that there are some now living who may see the whirligig of time once more make venesection fashionable. A paper entitled "The Lost Art," read by Prof. Gross before the 1878 meeting of the American Medical Association, was a straw indicating the direction of the wind, and since then other evidences of the same nature have at times appeared in the medical journals. The latest exhaustive paper on the subject which has come to our notice is one read by Dr. Wm. A. Dunn before the Section for Clinical Medicine and Pathology of the Suffolk, Mass., District Medical Society. In this paper the author sees nothing peculiar in the disrepute into which venesection has fallen. Mercury, the alkaline treatment and various other methods have in our day had their enthusiasts and their decriers, and who shall say that carbolic acid (already commencing to wane) and iodoform, and the salicylates may not in a very few years be relegated to the limbo of venesection?

The present neglect of venesection as a therapeutic measure is the continuation of a recoil from the abuses to which the practice was subjected and a similar abuse of the drugs named must be followed by a similar neglect.

Dr. Dunn closes his paper, in which he cites several cases, with the following conclusions:

1. That although the errors of former days, without doubt, allowed a very great abuse of venesection, it has sufficient merit as a therapeutic agent to demand our earnest consideration.

2. If we are sincere in following the motto of our society, *Naturâ duce*, we shall take the suggestions which nature gives and bleed in carefully selected cases.

3. That in febrile attacks a loss of blood will lower the temperature, and this decrease in temperature is known to be disproportionate to the amount of blood lost.

4. That by venesection we do not actually diminish the volume of blood, but we cause the blood to become more watery, the free passage of the blood through the pulmonary circuit seems to be promoted, and the functional labor which the lungs have to perform is diminished by the abstraction of a certain number of the more solid particles.

5. It is fallacious to depend upon the condition of the pulse alone as the criterion of the amount of blood to be removed, or the benefit which the patient derives by a venesection. After a venesection the pulse sometimes appears to indicate increased power of the heart's action. The artery seems to strike against the finger with more force than before the abstraction of blood. Formerly practitioners were misled by this effect upon the pulse, and blood-letting was employed as a means of increasing the power of the heart's action. The sensation which the finger receives is delusive, and is caused by the quickness of the movements of the artery. This has been shown by the sphygmograph to depend on the diminished tension

of the arteries following the abstraction of blood. It is to be borne in mind, says Flint, in estimating the power of the heart's action by the sensible characters of the pulse, that the sense of resistance which is felt and the amount of pressure required to impress the artery are the evidences of strength. I cannot do better than to make use of the statements quoted in Dr. Bowditch's monograph on venesection which he read at the annual meeting of the Massachusetts Medical Society, in 1871.

"Dr. Richardson says: * 'If blood-letting were in this day an unknown remedy, and were some man to discover it, we should receive that man as the greatest amongst us, and send him to posterity as one of the lights of the age.' And again he says: 'The confidence of the ancients in the practice of blood letting, their fearlessness of any immediate danger from it, was, I believe, as well founded in truth, as the cowardice and assertion, without observation, of the present day is founded on error.' He sums up as follows: 'I would recall that blood-letting as a point of scientific practice is still open to us in some stages (early stages) of typhoid fever, in cases where there is a sudden tension of blood, of which sunstroke is an example; in cases of chronic congestion of the brain; in cases of acute pain from (inflamed) serous membrane; in some cases of spasmodic pain (gallstones, etc.); in others of sudden arrest of circulation from concussion; in congestion of the right heart, and it may be in some cases of extreme hæmorrhage. Above all I claim for it a first place in the treatment of simple uræmic poisoning.'

Dr. Sutton† gives cases in which bleeding was resorted to to relieve distension of heart and passive congestion of the lungs. He ordered it, not to relieve inflammation, but to cure obstructions.

"Fordyce Barker, M. D ‡: 'I am gradually getting to bleed more frequently. My conviction that this resource in practice has been too much neglected by myself and others has been progressively growing for some years.' Dr. Barker would bleed to prevent abortion in some cases.§ So in renal congestions of the brain with coma, and when the skin is hot there is nothing so sure. He would bleed a woman in convulsions thirty ounces, and give elaterium also. 'We must not,' he also declares, 'avoid bleeding in some cases even if the patient is feeble. In puerperal mania, at least in some very rare cases, venesection is of the greatest benefit.'"

## Secret Remedies.

THE Pharmaceutical Journal would have a line drawn between secret remedies and "specialties." A "specialty" is defined by that journal to be "any substance or product which, prepared according to an official formula, realizes an improvement in the art of pharmacy, and presents special therapeutic advantages." "A 'secret' remedy is any simple or compound substance or medicine employed in the treatment of disease, which has not received official sanction or publication, and which has not been prepared for a particular case upon a medical prescription." One is, according to this author, the product of the professional skill and practical sense of the pharmacist, and is generally met with in competitions and industrial exhibitions. The other is the product of charlatanism and an inordinate desire to acquire a fortune rapidly; it makes itself known especially by advertisements in the public prints. The Pharmaceutical Journal goes on to say that even if the remedies of which neither the basis nor the proportions are known ought to be rejected from therapeutics, genuine specialties, which mark a progress in the pharmaceutic art, or intended to facilitate the administration of certain medicines, might, up to a certain point, be admitted. The distinction between a specialty and a secret remedy is not, however, always easy to establish.

To these remarks of our contemporary we can only say, go on brother, your aim is in the right direction, but there seems to be a mist in front of your mental vision that needs clearing up before you can see the difference between scientific pharmacy and the unscientific nature of some of these "specialties" that you seek to shield from the righteous condemnation of an outraged pharmaceutical profession. Specialties are never officinal preparations. One objection we have to them is that they are not prepared after officinal formulæ, nor are they improvements in the art of pharmacy, and many of them have never yet been proven of any special therapeutic advantage. If the author means to designate officinal preparations as "specialties" we challenge his authority for so doing. There is a marked difference between the officinal preparations of the pharmacopœia and the various "specialties" that flood the market. Surely the writer in the Pharmaceutical Journal is able to see the broad line of demarkation that separates "specialties" from officinal preparations, the formulæ for which are published in the Pharmacopœia. By his own definition the writer classifies "specialties" with secret remedies, for a secret remedy is one "which has not received officinal sanction or publication." And is not this classification usually correct; for what difference is there, except in degree, between a "specialty," the name of which is claimed as private property, and the formula of which is nowhere published so that any one else may manufacture it, and a remedy *all* knowledge of which is concealed from the public eye?

It would seem to us, however, that a better standard has been fixed to distinguish between science and secrecy than that given by this writer. It is not necessary that a thing should receive officinal sanction, or be recognized in the pharmacopœia as officinal to be scientific, and a remedy that is not thus sanctioned is not for that reason necessarily a secret remedy as this writer seems to infer. The standard to which we refer is that required by the patent laws of the United States in the giving of patents upon mechanical inventions. For a thing to be regarded as scientific by this standard, exact knowledge of it, whereby any one else can manufacture the same thing, must be published. No "specialty" can mark a

* Address Introductory to the Ninety-fifth Session of the Medical Society of London, on Blood-letting as a Point of Scientific Interest, by B. W. Richardson, M. D., F. R. S., President. Practitioner, No. 5, November, 1868.

† Medical Times and Gazette, December 18, 1869.

‡ New York Medical Journal, January, 1871.

§ "In former days abortion, even *that had gone so far as to cause bloody discharges from uterus*, I have seen checked by venesection. H. I. Bowditch."

progress in the pharmaceutic art unless this demand is complied with; no "specialty" that does not come up to this requirement can be admitted; and we do not think that we overstate, when we say that any "improvement in the art of pharmacy presenting special therapeutic advantages, the product of professional skill and practical sense of the pharmacist," is acceptable to both the medical and pharmaceutical professions, and if its claims to merit are proved there can be no reason for not admitting it. But proprietary "specialties," the names of which are claimed as trade-marks, and the art of the manufacture of which can be nowhere found in literature, cannot be admitted from the very nature of the case. To admit them would be to ruin scientific nomenclature, seriously injure medical literature, and encourage a system that weighs down all progress in the science of pharmacy like the old man of the sea. If pharmacy is to be a science it must conform to the demands of science; if those who practice the art wish it to be known as a profession they must be professional. Secrecy is not science, and the hiding of knowledge for trade purposes is not professional. A pharmacist's standing in his profession is in exact proportion to his record as a scientific man. The question is, what has he done to advance knowledge in pharmacy and to benefit his profession. It is required of him to publish full knowledge of all the improvements and discoveries he may make in the art, for the benefit of his science, and receive compensation therefor in the demand thus created for medicine manufactured by a member of the profession of so much "professional skill and practical sense." Not until this ideal is realized can pharmacy be regarded either as a science or a profession.

## The Bromides.

THE combinations of bromine occupy the prominent position which they do in modern medicine because of their influence over the nerve centres, whether through influencing their vascular supply or through some direct influence on the tissue itself, or through a combination of such action is not yet positively known. But though their *modus operandi* may not have been definitely determined, the fact nevertheless stands out that in the treatment of affections of the nervous system this class of remedies occupies a prominence not accorded any other drug in the pharmacopœia. It has largely supplanted opium in the treatment of nervous diseases and is almost as indispensable in this direction as is quinine in the treatment of the effects of malaria.

In view of this extensive applicability it becomes important to know the methods, if there is a difference in methods, of its administration. That a variety of results may be secured through various methods of its exhibition scarcely admits of a doubt, and we have been much interested in an article on this division of the subject which appeared from the pen of Dr. Geo. M. Beard in the July, 1881, issue of the Journal of Mental and Nervous Diseases. The article calls attention to the fact that the bromides are by no means innocent agents or incapable of mischief, and that to secure their effects they must be intelligently prescribed and with circumspection. Much mischief has resulted from their routine administration.

Dr. Beard has submitted a number of propositions bearing on this question of the bromides, which are of much practical importance:

*First.* The object of using the bromides is usually to produce a definite effect—bromization, in a greater or less degree. Bromization acts therapeutically through being itself a disease, which operating on the tissues involved renders them less susceptible to other disturbing causes. It is of different degrees, varying from very mild sedation to profound stupor and even death, for the bromides may be pushed to the extinction of life.

*Secondly.* Differences in the degrees of individual susceptibility render it impossible to specify the quantity of the drug necessary to bromization. In those nervous affections in which it is necessary to induce a profound impression, as in epilepsy for instance, the remedy must be pushed until the effect is secured, and that regardless of the doses specified in the books.

*Thirdly.* When it is necessary to create a profound impression, care must be taken not to continue it too long. This rule does not apply with so much force in epilepsy and epileptiform affections. In any case it is not safe to give large doses unless the patient can be held sufficiently under observation to have the effects noted.

*Fourthly.* When the affections for which they are given render necessary the continued use of the bromides, they should be combined with tonics. This has been long understood in the treatment of epilepsy, but it is not less necessary in other affections.

*Fifthly.* It is an advantage to combine a number of the bromides and Dr. Beard gives preference to the following: Bromide of potassium, which contains 68 per cent. of bromine; bromide of calcium, containing 80 per cent.; bromide of sodium, containing 80 per cent.; bromide of ammonium, containing 81 per cent.; and bromide of lithium which contains 92 per cent. of bromine. Bromide of sodium has the advantage of being less liable to cause gastric irritation. The bromide of of camphor, bromhydric acid, bromide of quinine, bromide of zinc and bromide of iron are also eligible combinations and may, under certain circumstances, be substituted for those of the primary list.

*Sixthly.* There are persons who, although they may not have epilepsy or be subject to epileptoid conditions, find it necessary to continue in the use of the bromides to overcome or obviate attacks of nervous perturbation.

The condition of the circulation in the various parts affected must be considered in discussing the applicability of the bromides. It is the general conception that they act by creating an anæmia of the brain and cord but Dr. Beard is of the opinion that they exert an influence *sui generis*. While they are not so markedly valuable in an anæmic condition they may nevertheless be given with benefit for a limited time in cases in which their employment would seem to be indicated regardless of the blood supply. In such cases, however, their use should not be long continued. They doubtless relieve passive congestions of the nerve centres, and

through this same property it would seem that they should aggravate the anæmic condition.

There is a large field for the employment of the bromides in modern practice, and the propositions here given will assist the reader to an intelligent appreciation of their nature and the cases demanding the temporary and continued use.

## A Reason why Physicians are Sometimes Disappointed in the Action of Drugs.

IN the attempt to account for the great diversity of reports concerning the action of drugs it is well to take into consideration the quality of the preparation used in the prescription. At the present time there is a great desire on the part of consumers to buy medicine cheaply, and plenty of unscrupulous manufacturers exist to supply the demand with some of the most worthless of trash. So serious has become this abuse that a bill has been introduced in Congress with a view to prevent it. Fluid extracts seem to be specially subject to adulteration. The reason for this is probably because fluid extracts are of such value as medicinal preparations. The demand for this product of the skill of modern pharmacy is a large one—larger, in fact, than for any other form of medicine in the pharmacopœia. For this reason it is especially important that they should be pure, and furnished up to the strength of the officinal standard. To prove the correctness of our assertion, and to enforce the importance of physicians using the most diligent care in prescribing to see to it that their prescriptions are filled with preparations of a brand that can be depended upon, we quote the following from the Oil and Drug News, abstracted from the Sanitary Engineer, a journal recognized as the organ of the National Board of Health in matters of this kind:

"Fluid extracts are prepared on a large scale by a dozen or more manufacturing firms in the United States. If a comparison be made between their respective products, says the Sanitary Engineer, a wide difference will be found to obtain; and this is not surprising, since probably none follow the officinal directions for the preparation of these liquids. Some of the processes believed to be at this time in actual use are: 1. Simple cold maceration followed by strong expression; 2. Hot digestion and expression; 3. Cold simple percolation alone; 4. Cold simple percolation, the stronger or first portion of the percolate being reserved and mixed with the weaker percolate after its concentration by evaporation; 5. Cold "fractional" or "repercolation;" 6. Hot percolation; 7. Percolation in some form preceded by maceration; 8. Boiling and finally combinations of these several methods. Competition is so great between the manufacturers that many utterly worthless fluid extracts are sold. Sometimes the quality of the several kinds of extracts made by the same firm is so surprisingly uniform that nearly the whole line seems to possess exactly the same color, density, odor and taste—no matter what drug they are made from—all of these physical properties being in such cases very far from those properly belonging to fluid extracts well made from good materials. Some fluid extracts look like wishy-washy tinctures; other are thick, black, forbidding looking stuff. Some seem to have been made from rejected siftings or an extremely low grade of drugs; others, apparently made of a fair drug, have been colored to satisfy an ignorant notion that a dark color denotes greater strength. We have some fluid extracts made with a very watery menstruum, expressly for the purpose of getting them black and thick, when so doing inevitably resulted in a material loss of medicinal value and power. It must not be supposed because most fluid extracts are dark colored and comparatively dense, that these qualities are proper, common characteristics of all, for many are, when carefully prepared, and of the very best materials, quite light colored. Every fluid extract should possess the proper odor of the drug it represents—a requisite not commonly satisfied—but its color depends upon the character of the constituents dissolved out by the menstruum used, and does not, in all instances, indicate the degree of strength of the preparation, the active constituents of the most active drugs being usually of a light color, if colored at all. The extractive matter which gives body and color to the fluid extracts, although it contains, associated with it, the real active principles, is not itself active. In the case of many drugs, the active principles of which are best dissolved by strongly alcoholic menstrua, which do extract much of the bark coloring matter, a comparatively light colored fluid extract is to be expected, and yet there are those who reject such a product solely on account of its light color, preferring to get one containing less of the true active principle but more of the dark soluble matter. We speak thus at length of these facts because they strongly support the argument that the pharmacopœia should fix the standards and furnish sufficient descriptions of all medicinal preparations of any importantance, for the chief reason why the fluid extracts are so different lies in the fact that only a small number of the long list in general use are to be found in the pharmacopœia at all, and none of these accompanied by any description of its proper color, density, or other obvious physical properties belonging to the genuine preparations made as officially directed. To determine what is the best possible menstruum to use in the preparation of the fluid extract of a certain drug is by no means an easy matter, having no official or other reliable guide to follow, and, judging by the character of the products offered in the market we do not hesitate to say that many manufacturers have a good deal to learn yet in that direction.

## The Remote Effects of Nostrum Prescribing.

AS a matter of fact, the nostrum mongers who seek to secure professional recognition under the plea that their copyrighted preparations are very different things from the patent medicines which are advertised directly to the public, care very little for the direct patronage of physicians. Although their goods are advertised to the profession, and some of them are regularly dispensed on prescriptions, the quantities thus sold are comparatively small. The endorsement of the profession, which is given by the fact that even some physicians prescribe them, is what they want, rather than the direct sales by the nostrum makers to the profession; and when they succeed in getting a physician of good standing in the community to attach his signature to a written endorsement, they have gained what they would not exchange for the benefit which would accrue from the physician's prescription of the nostrum for twenty years to come. The publication of this certificate in advertising mediums circulating among the public is what sends up the sales. "Of course," reason the public, "if Dr. Blank, of Blank, a gentleman whom all know but to honor and respect, and who has been honored with positions of trust, both in

medical colleges and medical societies, if he endorses Oleohybridine, Glisterine, or quextro-dynamine it must be a good thing, and we'll go right to the grocery and buy a bottle—no need of going to the doctor and paying him a dollar or two for a prescription."

Were the majority of the nostrums on the market to-day obliged to depend solely on direct professional patronage for support, their manufacturers would die of inanition in short order. But notwithstanding this indisputable fact, the profession is indirectly, and in the manner indicated, keeping them alive at the expense of its own vitality. It is not enough for physicians to say that they but seldom prescribe these specious nostrums. The professional and individual, as well as public interests, demand that they should shun them as things dangerous in both their immediate and their remote effects. The physician must assert his prerogative of selecting such simples in his prescription as will make a combination suited to the shades of pathological condition which present in individual cases. When he dispenses the ready-made conglomerations of drugs, many of which are far from synergistic, and even antagonistic, he abdicates the high position which he assumed on receiving from his alma mater the parchment which admitted him to the professional ranks. Recent events have made it all the more imperative that physicians should arouse themselves to the importance of action in the matter, and renew their covenants of fidelity to the principles so clearly enunciated in the code. The physician who trusts the pharmacist to prepare beforehand a combination of drugs to meet the indications in a case which presents itself in his practice, has, to say the least, wandered far from the paths of strictly professional and scientific rectitude.

## American Medical Association.

THE thirty-third annual meeting of the American Medical Association has passed into history. We have given in this number of the THERAPEUTIC GAZETTE a full resumé of its proceedings.

Two of the leading features in which the medical public were much interested were the action of the New York State Medical Society and the Richmond resolution relative to copyrights, trademarks and patents on medical preparations. The first was unanimously repudiated. The second was upheld by the Judicial Council in its affirmation that the code is full and complete in its disapproval and reprehension of all copyrights, trademarks and patents on medicine, and all those who lend their support by use or signature to that end. Every delegate, permanent member or member by invitation, will be required hereafter in filing their application for registration to endorse the Code of Ethics by his signature. We are gratified at this outcome, and it behooves all to re-read the code and to understand its requirements.

The meeting was a pleasant one in all respects. The Sections were well attended, but the material was not as well worked up as it should be. This depends upon the officers of the Sections who should begin at once to prepare for the next meeting by correspondence or otherwise, to have suitable papers prepared and to know what papers will be on hand when wanted.

All praise is due to the committee of arrangements and citizens of St. Paul for their endeavors to make the association's visit profitable and pleasant. We believe they fully succeeded and the remembrance of their effort will long remain green in the hearts and memories of those who were present. The railroads of Minnesota were more than liberal in their inclusion of the ladies to the freedom of their cars, not merely for one ride, but as often as they pleased and to where they pleased.

The arrangement for an association medical journal was not completed. Steps were, however, taken to feel the temperament of the members for the change contemplated. The great difficulty, in our opinion, will be in the necessity of an act of incorporation. This may require an entire change in the association itself, and which we believe the genius fo the newly-elected board of trustees will not be able to overcome, for so soon as the American Medical Association becomes a class corporation, capable of suing and being sued, it will lose its usefulness and become a field for continuous litigation. We believe in letting well alone and this, we think, will be the second sober thought of the members. Could the history of the British Medical Journal be laid fully before the members of the association and the peculiar organization of the British Medical Association, they would at once see the incongruity of the situation. Make haste slowly is a pretty good old proverb.

## National Adulteration Bill.

IT is a significant fact that the people are ever ready to remedy an evil which threatens life and health, as soon as they are convinced of the existence of the evil. The instinct of self-preservation is paramount, and the better sentiment of the community is sufficiently alive to the interests of the ignorant, sufficiently philanthropic to stimulate it to devise measures calculated to prevent or ward off dangers which it requires in some instances a somewhat superior intelligence to detect.

A measure looking towards the correction of an evil which is sufficiently insidious in its nature to escape uneducated observation, is the Adulteration Bill now before Congress, and an outline of which we have published elsewhere in our present number. The evils of adulteration in the matter of foods are very far-reaching, the practice affecting not only the physical integrity of the adult population, but seriously compromising the health and growth of infants, and thus prolonging its baneful effects not only into adult life, but also casting its blight among future progeny. The dangers, both immediate and remote, from this source are incalculable, and though it requires the investigation of experts to detect them, the fact should only stimulate the authorities to increased vigilance rather than operate as an excuse for lack of vigorous onslaught on the prevalent evil.

In the matter of drugs, the proposed bill provides for radical measures looking to the protection of such articles as have a recognized officinal standard. There are, however, many preparations

on the market for which there is no such standard, which are at best a standard for themselves, and are subject to adulteration and sophistication as the dishonesty or whims of their manufacturers may dictate. This is particularly true of the majority of the proprietary medicines which abound. Having their origin in no scientific principle, and being mere whimsical combinations of drugs, necessarily without any reference to the indications in the individual cases in which they are administered, it is practically impossible to keep them within the legitimate bounds contemplated by the proposed bill. In the case of legitimate officinal drugs or compounds, there is, however, a recognized standard to which it is quite practicable to enforce conformity. This standard is not subject to variation with the whims of the manufacturers, and the fact that there is no monopoly of the manufacture or sale of the article ensures that competition among reputable houses which is calculated to guarantee the standard quality.

It is a fallacious argument which the manufacturers of proprietary compounds advance in support of the monopoly which they have distorted the copyright law to give them, that by having the manufacture of the article thus under their exclusive control, they are enabled to guarantee its quality. It would be equally logical to advance the same argument in support of the statement that such monopoly opens up the door to adulteration and sophistication. By the removal of the safeguard of competition, the house thus having the exclusive control is enabled to go to a length in dishonesty of manufacture, which would otherwise be practically impossible.

While competition in all products which are not devoted to the sustenance of the body, or to its relief when diseased, is calculated to reduce price at the expense of quality, in the matter of food and medicine it is not so. In the matter of standard, officinal medicines, it is particularly not so, and from the very nature of the case. The physician studies the effect of a drug as it conforms to the recognized standard. In the matter of physiological action and dosage, it is the ideal drug which is the standard, and in practice the physician expects as near an approach as possible to this ideal. He soon detects any serious deviation from this standard, and no manufacturer of officinal preparations dares, as he values his reputation, and as he desires professional patronage, to deliberately sacrifice quality to price.

We hope the bill referred to will become a law but it cannot be productive of the good which it might, until the government interferes to throw down the protection which the manufacturers of proprietary copyrighted preparations have found (without sufficient warrant, we believe), in existing patent and copyright laws.

## Chemical Constitution of Jamaica Dogwood.

WE take pleasure in publishing Mr. Heim's report on the chemical constitution of Jamaica Dogwood, and would beg to call the special attention of our readers to the subject, hoping that some one will take sufficient interest therein to complete the researches of Mr. Heim.

## Aggregation—Not Patentable.

"A mere aggregation and bringing together of old devices or instrumentalities is not a patentable invention, unless some new result is obtained. The result of holding firmly the ends of railroad-rails by means of screws or bolts and by a plate under the ends is well known, and the simple adoption and application of a ribbed plate with the bolt screwed to its place between the ribs is only the application of two old devices without the attainment of any new result."

The above is from a recent decision of the Supreme Court of the District of Columbia and is very significant as enunciating a principle which reason and common sense must recognize in the matter of the combinations of drugs which flood the market under the protection of trade-mark names. It is one of the most incongruous facts in this whole system that a different interpretation should obtain in the matter of the aggregation of drugs than that which is given to existing laws in their application to mechanical inventions. Take, as an instance, the nostrum "Iodia." The Druggist, in answer to a query of a correspondent, gives the formula for its preparation as follows:

" Fluid extract stillingia, 3 ounces.
" prickly ash, 1 ounce.
" saxifraga, ½ ounce.
" yellow parilla, ½ ounce.
" blue flag, ½ ounce.
Iodide of potassium, 256 grains.
Pyrophosphate of iron, 256 grains.
Dilute phosphoric acid, ½ ounce.

Dissolve the iodide in the mixture, and the iron in two ounces of hot water; add the solution gradually and lastly the phosphoric acid. Let stand twenty-four hours and filter."

What, we would ask, is there in this but such an aggregation of simples which have been familiar to the profession for time out of mind, as might very naturally suggest itself to any physician in prescribing an alterative mixture? It has not even pharmaceutical elegance to recommend it, it making such an unsightly mixture as no educated pharmacist would turn out. And yet the laws are invoked to give the firm who makes this mixture a monopoly of its sale! It is an outrage on both the public and the profession, and it is extremely doubtful, in the light of the decision which we have cited above, whether the protection which is claimed would be confirmed by the Supreme Court.

## A Museum of Hygiene.

WE have received the following circular, issued by the Navy Department, which we take pleasure in inserting in our columns. The object for which this museum is founded is one of interest and importance:

NAVY DEPARTMENT,
BUREAU OF MEDICINE AND SURGERY,
WASHINGTON, January 10, 1882.

The surgeon-general of the navy has established a Museum of Hygiene connected with this bureau, which the American Public Health Association has made its permanent central repository.

It is intended that it shall exhibit the present state and future progress of the nation in all departments of hygiene, and to carry out this import-

ant scheme the co-operation of physicians, engineers architects, builders, manufacturers, inventors, and others interested in sanitary matters, is not only desirable but indispensable.

Contributions of articles, appliances, models, drawings, etc., illustrating improvements in food, water supply, bedding, clothing, marine architecture, house and hospital construction and furniture; apparatus for heating, illumination, ventilation, and removal of excreta and refuse; culinary, laundry and bath facilities; appliances for physical culture and exercise; and whatever else tends to the preservation of health and the prevention of disease are therefore solicited.

Contributions should be sent to the address of the surgeon-general of the navy. Donors and depositors will, in every case, be duly credited on the descriptive labels of their exhibits.

Respectfully,

PHILIP S. WALES,
*Surgeon-General, U. S. Navy.*

## An Argument in Favor of the Therapeutic Value of Indigenous Plants.

THE San Francisco *Journal of Commerce* is gratified by the increasing demand for the medical plants of California. When these plants were introduced as "New Remedies," there was reason to believe, from the past history of medicine, that the demand would be a transient one; but this expectation has not been borne out by the facts of the case. The increasing demand is certainly a strong argument with regard to their therapeutic value and appreciation by the profession. Some of them have not come up to the expectations that existed on the part of their introducers, others have exceeded what was expected of them, while still others have proven of very little value. As this journal has been so instrumental in bringing these valuable indigenous plants into scientific notice, it is gratifying to us also that they are proving of so much worth.

The following named plants are said to be the leading ones that are receiving attention, viz: Cascara sagrada, eucalyptus globulus, yerba santa, yerba buena, Oregon grape root, canchalgua, besides bringing into more extended notice drugs from other climes, such as kava kava root, cedron seeds, coca leaves, damiana, etc.

# Abstracts.

### The Effect of the Mind on the Body as a Therapeutic Agency.

Mr. Richard A. Proctor in his "Rough Ways made Smooth," mentions a number of very interesting illustrations of the effect of the mind on the body, and again arises the query, how far it is a legitimate practice to deceive a patient by asserting what is not true for the purposes of cure. Mr. Proctor says that the question, how far it is a legitimate medical practice to deceive a patient in such cases has been raised by Dr. Todd, and is answered by him in a way which seems open to objection. "Nothing," says Dr. Todd, "can justify our asserting what is not true in order to gain the patient's confidence." And elsewhere, "in regard to misleading patients generally, even *causa scientiæ*, one of the practical difficulties of the investigation into the influence of the imagination present is certainly the unseemliness of making experiments of this nature, and the danger of sullying that strict honor, which by no profession is more prized or maintained than by the profession of the medical art." To this Proctor replies that if the cause were that of science alone, this emphatic opposition to the misleading of a patient may be regarded as justified. But there certainly seems an excess of strictness in objecting to the deception of a patient for his own good. If a doctor is perfectly satisfied that a patient will not recover without a strong mental effort, and that this effort will not be made unless the patient is misled with regard to the nature of the treatment, the doctor might fairly consider it his duty to "assert what is not true to gain the patient's confidence." An adherence to veracity so scrupulous as to outweigh the life of a fellow creature may appear deserving of admiration when dealt with in a treatise on morals, but in actual life would be altogether objectionable. If it be urged that liberty to deviate in some such cases from strict truth might be open to abuse, it may at once be answered that so also would liberty to select the strictly veracious course (under any circumstances) be open to abuse. Consider, for instance, the following case, which is by no means an imaginary one. A man is lying prostrate under a very dangerous illness, and it is known to all who attend on him that any severe mental shock must inevitably prove fatal to him, but that if for a few days he can be kept free from mental disturbance he will recover. He sends a messenger to inquire about the health of a beloved relative whom he knows to be in a critical condition, or exposed perhaps to some special form of danger distinct from illness. The messenger, when he reaches that relative's house, is informed that death has been there before him. Shall he return and tell the patient the truth, thereby certainly killing him? Let it be assumed that he must at any rate take some message back; protracted anxiety being, let us assume, as dangerous for the patient as the sudden shock of illness. He can only do one of two things—tell the truth and kill, or assert what is not true and spare the patient's life. Few will question what he ought to do. But the question may be raised, is he to be regarded even as free to choose? He holds, for the time being, the patient's life in his hands; he can kill or spare; if he kills, how should he escape reprobation? His fatal veracity might not be the offspring of a tender conscience, but of greed or some other evil passion. The doctor, in the cases considered by Todd, is satisfied that there is a chance, at any rate, of saving life, if his patient is assured that certain substances are medicines potent to cure. Is he justified in refusing to his patient this chance of life? Doctors might unquestionably use for a wrong purpose the right of misleading a patient for his good; but they might use for a worse purpose the right (if they possessed it) of killing him with the blunt truth.

Mr. Proctor cites a singular case as bearing somewhat on the right to mislead a patient, described not long since in a public address by a

well known American doctor. A young lady in one of the western states was convinced that a bristle of her tooth-brush had become imbedded in her throat, and was causing mischief there, which would terminate fatally if the foreign body were not removed. The family doctor, and after him several physicians of repute, examined her throat, and all agreed in assuring her (which really was the case) that there was no bristle there at all. She continued to grow worse, the imaginary bristle causing all the effects which a real bristle might perhaps have caused—at any rate, all the effects which she imagined that a real bristle would cause. At last a young surgeon was consulted, who followed a different line of treatment, looking long and carefully at her throat, and examining the afflicted part with several instruments, he at last gravely assured her that she was right; a bristle was there, and the inflammation she experienced was undoubtedly due to it. He could not, he said, remove the bristle at once, as the only instrument which would effectually reach it was at home. He went home for it, as he said, but really to enclose in an instrument of suitable form a bristle from a tooth brush. Returning, he carefully nipped the skin of the throat where the young lady felt the pricking of the non-existent bristle, and after causing her enough discomfort to satisfy her that this time the operation of extracting the bristle was certainly in progress, he withdrew the instrument in triumph, and along with it the bristle, which had indeed first entered her mouth in that instrument's company. From that time she recovered rapidly. For it will be understood that though there was no real cause for her fears, a real irritation had been excited by them, and organic mischief had resulted. Mr. Proctor says that the story ends here as far as the present subject is concerned, though as a tale it may seem to many incomplete without a few words more. The young surgeon, we are told, was highly in favor thenceforth. He had not only saved her life, as she supposed, but had shown her to have been right, and all her friends, as well as the other doctors, wrong. She would have accepted his hand but from the circumstance that, having already a wife, he omitted to offer it. She blazoned abroad his fame, however, until he had become famous "throughout the whole state." All would have ended pleasantly had he not in a moment of weakness confided the true explanation of the young lady's cure to his wife—of course under promise of secrecy—which, however, did not prevent the story from reaching the young lady's ears in a few hours. It is hardly necessary to say that henceforth her feelings towards the doctor were the reverse of those she had entertained before. True, she owed her cure to him, but the cure was worse that the illness.

### The Treatment of Diabetes.

Dr. William Squire, physician to the Hampstead hospital for diseases of the chest, and to the St. George Dispensary, treats of this subject at some length in the Practitioner for May, 1882. He says whether diabetes be itself a disease, or a disturbance arising in the course of various diseases, whether prominent in acute illness, or one among the obscure symptoms of chronic ailments, and whatever its origin may be, the conditions to be observed in its management are invariably the same—the first essential of successful treatment is a carefully restricted diet.

The author goes on to explain what kind of a diet should be employed, and says that during the temporary glycosuria of some febrile states the use of starchy and saccharine foods and diluents, such as arrow-root, corn-flour, cocoa, barley water, and gruel is to be avoided; milk is only to be used sparingly, cream is better; glycerine should replace sugar in cookery and in sweetening tea and coffee. Lemonade is best made with lemon juice, glycerine, and cold water; in this white of egg may well be diffused. A little toast may be allowed, with plenty of butter, eggs, and beef-tea. The conscious subject of diabetes mostly adopts this method of nursing the most trifling ailments resulting from cold or fatigue; beef-tea is habitually substituted for gruel; limes and lemons are known as almost the only fruits free from sugar. Alcoholic stimulants would generally afford grateful help, but no wine can be quite without sugar; no brandy is without liquor. Holland, unsweetened gin, and some, but not all, kinds of whisky are fit adjuncts to the diabetic dietary.

Among the remedial agents mentioned by this author as recommended in diabetes we note salicylate of soda which has been used with success in the symmetrical neuralgia of this state; the remedy had no effect on the diabetes itself in the several cases under his observation. Of the good to be obtained from codeia and from extract of opium, in certain conditions attendant upon diabetes, this author states that his experience is amply confirmatory; he employs half a grain of either with advantage, in a pill, or a solution of codeia with dilute hydrochloric acid after meals. He finds that the improvement secured by their aid is not merely temporary, nor is it obtained at the cost of any decline of vital power—rather by a conservation of the nervous energy most readily exhausted in diabetis. Once where complete recovery resulted after three and a half ounces of sugar were excreted daily, codeia in full doses was one of the means employed.

The author goes on to say that in the course of this disease sugar may completely disappear from the urine in some unfavorable contingencies. It is not rarely absent for considerable periods during favorable convalescence. At these times the diet may be varied to almost any extent, and milk need not be excluded. Such disappearance of sugar must not be considered as cure of the diabetes; let any shock or fatigue shake the precarious balance of health, and a return to the more strict rules of dietary becomes again necessary. Milk must again be prohibited for a while, because of the large quantity of sugar contained in the whey; very little of this remains on the cream, and cheese and curd are nearly free from it; butter is entirely unobjectionable. If skim milk is to be recommended in diabetes, why not whey? It is free from curd as well as from cream, while both contain all the sugar of the milk. Indeed, it is not surprising that sugar has been recommended in diabetes; could it be given only in homœopathic principles, so that all sugar ingested could be

reduced to some minute fraction of a grain a day, improvement would soon be evident.

Curd should be more utilized in the diabetic diet. Cheese cakes made with it vary the fare that so much needs variation. The variety of supply for the more substantial dishes is ample; but for the lighter additions to a meal, that make eating less a duty than a pleasure, there is always room for some new combination. An agreeable cheese cake, baked in ramakin papers instead of in pastry, can be made, with or without gluten bread and curd, in the following way: Grate one ounce of bread with the rind of two lemons, and mix with half an ounce of glycerin; with this whisk up the whites of three eggs, two ounces of cream, and one ounce of fresh butter, melted by heat; add also the juice of two lemons and the yolks of the three eggs, well beaten; mix all together, and bake in ramakin cups for about twenty minutes, in a rather quick oven. A little more glycerin, or a little less lemon juice, will modify the flavor and consistence of this confection. It is to be eaten when cold.

The management of diabetes, besides attention to diet, requires moderation in exercise, very complete intervals of repose, plenty of fresh air, and avoidance of any excess in mental or bodily exertion. To control the exacerbations of the disease, absolute rest as well as rigid diet must be enjoined. At these times, for days together, the quantity of sugar excreted exceeds the amount to be derived from the starchy and saccharine food taken; a considerable amount of it must, therefore, come from amyloid material and from waste products within the body. The protein compounds may be represented by sugar and ammonia, and their rapid disintegration may give rise to both products; with a less degree of disturbance this change would be less, some of the ammonia would be converted into urea and excreted as such, while less sugar would be formed. Rest and diet without medicine, in the course of diabetes mellitus, has gradually brought about a great diminution in the quantity of urine, a complete absence from it of sugar, with great proportional increase in the urea; and this favorable change has continued for weeks and months with but rare re-appearance of the sugar, though fruit, wine, milk, and ordinary bread, the greatest luxury to a diabetic convalescent, have been allowed.

## Drinking Water and its Relations to Public Health.

The following story, taken from an official circular recently received, illustrates the importance of care in regard to drinking water. Physicians should take the trouble to inspect the premises of patients suffering with diseases the nature of which points to a contamination of the water supply, and by so doing remove a cause of offense to the public welfare as well as that of their patients:

"In 1865, a very loathsome disease, which was epidemic in the city of Delhi, had broken out in the beginning of the year with exceptional severity. The government desired that this question should be looked into without the least delay. A commission was accordingly appointed, consisting of three members, to investigate the cause of the disease, and to report to the governor-general. The senior member, who was also the president of the committee, was the head of the medical department. He was a surgeon, and celebrated for his skill and dexterity as an operator. The second man was an inspector-general of hospitals, who has since been deservedly raised to the honor of knighthood and to the position of honorary physician to the queen, on account of his eminent abilities as a physician. The third member was, of course, the sanitary commissioner, who was at the time only an assistant surgeon in the army rank. The two distinguished seniors of the service talked a good deal of the 'waves of the disease,' speculated on the possible introduction into Delhi of the Aleppo boil by immigrants or visitors from Asia Minor, and drew out a lengthy and learned report, full of plausible and ingenious theories. The sanitary officer, however, went straight to the water supplies of the city. He analyzed the water of every well in the place, together with that of the river and the canal. The water of one well, next the Jummo Musjid, one of the most ancient of Mohammedan temples in Hindostan, was found to contain upwards of twelve grains of decomposed organic matter to the gallon. It happened, too, that this well was situated in the very centre of the district in which the disease prevailed. In his report, the sanitary commissioner had no hesitation in mentioning this as the source and origin of the loathsome disease, and in suggesting the closing of the well as the only measure necessary to stamp it out. The Mohammedans objected to any interference with their well, which they regarded with almost superstitious veneration, for it had been sunk at the time of Akbar the Great, when the mosque itself was built, and the feelings of race and religion were strongly associated with both these structures. Lord Lawrence, however, being a man of ample resources, thought of a plan which would at once conciliate the good will of the bigots and test the soundness of scientific conclusions. An order was issued to the effect that all the wells in the Mohammedan quarter of the city would be cleaned out at the public expense, and the writer received his instructions in the following curt demi-official: 'Have bottom of well dug up to about fifteen feet. Examine the mud and see whence comes the filth. Then analyze fresh water from spring, and report if fit for use.' All this was quite unnecessary, for after the well was drained and the bottom dug up to about six or seven feet, an *immense mass of human bones* was found imbedded in the black mud and looking as black as the mud itself. After this discovery there was no difficulty in persuading the Mohammedans to close up the well. In the course of the year the famous Delhi sore, in spite of the 'waves of disease,' and in spite of the visitors from Asia Minor, vanished from Delhi, and has never since reappeared.

## The National Adulteration Bill.

The bill now before Congress relating to the adulteration of food and drugs, will soon claim the attention of the House. The bill is deficient in many particulars, but is probably better than no act, if adverse lobbying does not divest it of all its essential nature before its passage.

The first section of the bill provides that no person or corporation shall transport, or cause to be transported, from one State or Territory to another, for the purpose of sale or barter, any food or drug adulterated within the meaning of the act under a penalty of not more than $50 fine for each offense. Section two provides that no person on territory belonging to the United States shall sell, or offer for sale, any adulterated food or drug, and making such sale a misdemeanor, punishable by fine. Section three provides for the examination of foreign foods and drugs, which shall not be permitted to pass the Custom House if adulterated. Section four provides for the methods of analysis of imported foods and drugs, while section five authorizes the treasurer to appoint members to do the work, the names to be recommended by the National Board of Health.

Sections six and seven provide for the examination and analysis of samples of drugs and food, and the prosecution of offenders. Section eight defines the meaning of the term adulterated, as follows:

a. In the case of drugs:

First.—If when sold under or by a name recognized in the United States Pharmacopœia it differs from the standard of strength, quality or purity laid down therein.

Second—If when sold under or by a name not recognized in the United States Pharmacopœia, but which is found in some other pharmacopœia, or other standard work on materia medica, it differs materially from the standard of strength, quality or purity laid down in such work.

Third—If its strength or purity fall below the professed standard under which it is sold.

b. In the case of food or drink.

First—If any substance or substances has or have been mixed with it so as to reduce or lower or injuriously affect its quality or strength.

Second—If any inferior or cheaper substance or substances have been substituted wholly or in part for the article.

Third—If any valuable constituent of the article has been wholly or in part abstracted.

Fourth—If it be an imitation of or be sold under the name of another article.

Fifth—If it consist wholly or in part of a diseased or decomposed, or putrid or rotten animal or vegetable substance, whether manufactured or not, or, in the case of milk, it is the produce of a diseased animal.

Sixth—If it be colored or coated, or polished or powdered, whereby damage is concealed, or it is made to appear better than it really is, or of greater value.

Seventh—If it contain any added poisonous ingredient, or any ingredient which may render such article injurious to the health of a person consuming it; Provided, that the National Board of Health may, with the approval of the Secretary of the Treasury, from time to time declare certain articles or preparations to be exempt from the provisions of this act; And provided further, That the provisions of this act shall not apply to mixtures or compounds recognized as ordinary articles of food, provided that the same are not injurious to health, and that the articles are distinctly labeled as a mixture, stating the components of the mixture.

The remaining sections provide for the publication by the National Board of Health of lists of the articles exempted under the preceding section, and defines the applications of the terms "food' and "drug."

## Grindelia Robusta.

Grindelia robusta has been found especially efficacious in asthma, giving prompt relief and effecting cures in cases previously rebellious to medication. Occasionally, however, as is, indeed, the case with all therapeutical agents, it has failed, but the circumstances attending these failures have not yet been determined. Farther investigations regarding its action in this disease, and the cause of its occasional failures, are required. It has likewise been found efficient in bronchial affections, in pertussus, and in some renal maladies. The fluid extract is the preparation usually employed, the dose of which is from ten to fifteen minims, repeated three or four times a day, as may be required. Children require doses of from five to fifteen or twenty minims.—*King.*

The herb has a balsamic odor and taste; and a syrup made from the decoction is not unpalatable, and taken internally acts as an expectorant. But the chief value of the plant is as a remedy in asthma. A clergyman who had suffered extremely from that disease, and in whose case all the remedies usually given had been tried in vain, took, on going to bed, a wineglassful of syrup made from the herb, slept soundly through the night, and, under its continued use, had not been compelled for seven months to pass one night out of bed. It has also been very highly commended in iritis, used internally and externally, and as a local application in burns, vaginitis, and genito-urinary catarrh. It may be used as a poultice or injection (f ʒ ssoj.)—*United States Dispensatory.*

Grindelia has a persistent acrid and bitter taste, and excites the secretion of saliva. It is said to reduce the respiration rate, to stimulate the brain and spinal cord, and subsequently to produce a tendency to repose or sleep, with impaired power of the legs. In experiments on frogs it appeared to arrest breathing and to cause engorgement of the heart. It increases the secretion of urine, and irritates the kidneys. The herb of this plant is reputed to be useful in whooping cough and bronchitis, and of singular efficacy in asthma. We have been informed of several cases occurring in aged persons, in which half a teaspoonful of the fluid extract afforded almost instantaneous relief. It has been used with alleged advantage in catarrh of the bladder and of the uterus, and as a dressing for burns and blisters. The dose for a child two years old is stated to be ten drops every two hours of the fluid extract. It is added that no unpleasant symptoms have been observed after large doses.—*National Dispensatory, Stillé and Maisch.*

## An Eye Wash for Dissolving Metallic Foreign Bodies in the Eye.

Dr. Rodriguez reports, in the Revista de Ciercias Medicus, a very interesting and novel method for removing metallic foreign bodies from the eye by

means of an eye wash, composed of ingredients capable of forming a chemical union with the foreign body and transforming the same into a soluble salt, which is washed from the eye by the application. He instances a case of a blacksmith, who, while forging a piece of iron, received a small splinter in his left eye, which remained there incrusted in spite of all attempts at its removal. This wash was then employed, and with extremely satisfactory results. Formula: Rose water, 90 grms; iodine, .05 grm; iodide of potassium, .05 grm. Mix. The particle of metal was transformed by this collyrium into a soluble iodide of iron, and all traces of the foreign body disappeared. The cornea regained its normal condition, and the vision remained unaffected.

### Can Diphtheria and Scarlet Fever be Prevented?

At the request of Dr. Wm. Oldright, chairman of the new Provincial Board of Health, Mr. John K. Allen, chief clerk in the Bureau of Health, Lansing, Mich., wrote a letter to the Globe on the subject of Health Officers. In his letter he answers the above question in the following language:

"What has been done can be done." These diseases have been confined to the first cases, and the same measures applied again would have a like result. These measures include:

(*a*) An active Board of Health and a competent health officer.

(*b*) Prompt notice of sickness to the health officer before exposure of other persons.

(*c*) Isolation of those sick and the necessary attendants.

(*d*) After recovery or death a thorough disinfection of all rooms, clothing, or other material liable to become infected.

These four measures with the details as practiced by a faithful and efficient health officer, would reduce the cases of these diseases to a minimum, and be economical to the jurisdiction to which he might belong.

### Calabar Bean in Obstinate Constipation.

We notice a report of the efficacy of calabar bean in the Berlin Klin. Wochenschrift which illustrates the process of reasoning based on a knowledge of the physiological action of drugs. It is known that calabar bean produces tetanus of the intestinal muscular coats in animals, and hence will bring about the forcible expulsion of the contents of the intestines. Dr. Schæfer has on this ground employed it in obstinate constipation depending on atony of the muscular coats, such as is often observed in women, and in old men. The results justified his expectations, for severe cases have yielded in less than 24 hours after administration of the drug. He employs a solution of the following formula: Extracti physostigmatis, 0.05 grm.; glycerini, 10.00 grms. Six drops every three hours during the day. The editor would suggest the combination of this agent with cascara sagrada in those cases where that drug does not produce sufficient peristaltic action. Such a combination might prove of advantage by securing in addition to the action of the calabar bean the peculiar stimulating action on the secretory organs connected with the alimentary canal, which has made so much deserved reputation for the bark of rhamnus purshiana.

### The Plant vs. Its Active Principles.

The medical virtues of plants do not, as a rule, depend upon a single active principle, but on several active principles combined together in various proportions in the forms of resins, alkaloidal salts, glucosides, etc., each with peculiar virtues of its own, and probably acting together to produce some definite result unlike that which may be obtained from any one of these principles taken singly, or by themselves. It is well known, for example, that neither quinia or morphia represents the full remedial virtues of the drugs from which it is abstracted, but that both of these drugs contain a number of other principles of diverse action in various proportions, and with peculiar and distinguishing virtues. These natural combinations of diverse and powerful principles acting so differently on the economy, suggest the probability of some marked adaptability for their use, and in these proportions. In the cure of the various diseases for which certain drugs which have acquired so much reputation, and, though recognizing the great discoveries of modern science in the isolation and application of active principles, is it not well to stop and inquire somewhat of nature before confining our treatment of disease entirely to simples or active principles separated from plants by the chemist's art, as some would have us do if we have understood their teachings aright.—*Stewart.*

### The Disease of Modern Life.

Refinement and culture create new ambitions, new responsibilities, and new anxieties. Every added anxiety brings an additional mental strain. The mind—and the mind only—is constantly on the alert. The brain has no rest. Nutrition of muscles and brain is diverted to repair the undue waste of nervous tissue; and sooner or later come, inevitably, to parent or offspring, the long list of nervous diseases which now so threateningly confront us. The testimony of the most distinguished neurologists—especially in America—is uniform and undeniable, that diseases of the brain, the spinal cord, and the nerves which issue from them, or the sympathetic system, are alarmingly on the increase. The causes which tend directly to produce such results are more potent and more active in the Northern United States than in any other locality on the face of the globe.—*Kingsley.*

### Season and Human Growth.

The question whether the season of the year exerts an influence upon the rate of the growth of the human body is interesting, in view of the many analogies which vegetable and animal life afford. The observations reported by Pagliani, that, in the case of girls living in the country, the first menstruation occurs much more frequently in the spring than at other seasons, seems to indicate that the nutritive processes of the human body are really influenced by the seasons, and that, therefore, the rate of growth may be expected to depend to some extent upon the varying conditions thus afforded. —*Bowditch.*

The social causes of deterioration and disease are such as are to a great extent to be met with by combined individual action. They include chiefly intemperance, immorality, crime, indolence, and overwork, depressing passions, injudicious marriages and the extremes of fashion. These malign influences, as is apparent, must be combatted from the pulpit, the press, the profession, and by the will power of each individual separately, for each of these impairs health either directly or indirectly, and, in proportion to their prevalence, reduces the standards of longevity, intelligence and usefulness. —*Exchange.*

## Book Reviews and Notices.

**The Illustrated Quarterly of Medicine and Surgery.** Edited by George Henry Fox, Clinical Professor of Diseases of the Skin, College of Physicians and Surgeons, New York, and Frederick R. Sturgis, Professor of Venereal Diseases, Medical Department, University of New York; with the coöperation of Profs. Willard Parker, A. C. Post, W. H. VanBuren, Jas. R. Wood, J. L. Little, T. G. Thomas, A. L. Loomis, F. Delafield, D. B. St. John Roosa, C. R. Agnew and Austin Flint.

Contents of Vol. i, No. 1, Jan. 1882:

Restoration of Upper Lip; five illustrations. A. C. Post, M. D., LL. D.

Fibrous Tumor of the Face; three illustrations. Willard Parker, M. D.

Laparotomy for Removal of Menstrual Blood, etc.; five illustrations. T. G. Thomas, M. D.

Separation of the Lower Epiphysis of the Femur; two illustrations. Jas. L. Little, M. D.

Dislocation of the Columnar Cartilage of the Nose; one illustration, F. H. Bosworth, M. D.

Facial Paralysis, in Connection with Aural Disease; four illustrations. Sam'l Sexton, M. D.

A Rare Form of Corneal Opacity; one illustration. T. R. Pooly, M. D.

Contents of Vol. i, No. 2, April:

Ovarian Pregnancy; one illustration. Isaac E. Taylor, M. D.

Facial Atrophy; one illustration. E. C. Seguin, M. D.

Plastic Operation for Loss of Nose, Lower Eye Lids, etc.; nine illustrations. Thomas T. Sabine, M. D.

Dupuytren's Contraction of the Fingers; two illustrations. Robt. Abbe, M. D.

The Pathological Anatomy of a Case of Spinal Caries with Paraplegia; two illustrations. V. B. Gibney, M. D.

The History of Three Cases of Hip Disease in the Third Stage; nine illustrations. A. A. Judson, M. D.

Skin Grafting (with report of a case); two illustrations. G. A. Van Wageman, M. D.

We have given the contents of the first two numbers, with the names of the writers, in order that our readers may form their own estimate of the value of this new quarterly. The character of the illustrations, the quality of the paper, and the clearness of the typography bring it to the front as a first-class publication, and as such we cordially commend it.

Published by E. B. Treat, No. 757 Broadway, New York; J. & A. Churchill, London, 11 New Burlington street; J. B. Baillière & Sons, Paris, 19 Rue Hautefeuille. Copyright, 1882, by E. B. Treat. Price $8 per annum, or in quarterly payments of $2. No subscription for less than one year.

**Manual of Diseases of the Skin,** with an analysis of eight thousand consecutive cases and a formulary. By L. Duncan Bulkley, A. M., M. D., Attending Physician for Skin and Venereal Diseases at the New York Hospital, Out-Patient Department; Dermatologist to the Hospital for Ruptured and Crippled; late Physician to the Skin Department Demilt Dispensary, New York; Author of "Eczema and its Management"; Editor of the "Archives of Dermatology"; Permanent Member of the American Medical Association, etc., etc.
New York: G. P. Putnam's Sons, 27 and 29 West Twenty-Third Street. 1882. Price, $1.25.

We are sorry to see another manual on any subject pertaining to medicine. In the one before us, the author in his preface fully justifies us. He states, "The following pages represent an attempt to present the subject of diseases of the skin concisely, and yet with sufficient details to be of practical value to the student and practitioner." Again, "Patholgy is introduced but briefly, and no attempt has been made to enter the literature of the subject. Differential diagnosis has not been fully entered on, for want of space." Dr. Bulkley gives no proper excuse why this manual should be written. We understand he has in contemplation, if he has not already commenced a work on skin diseases, which, from his knowledge and experience, ought to give credit to his name, and which will require all his energy to make it superior to works already written on the subject. Manuals are useless to the practitioner, and worse than useless to the student, for from them he gains only a smattering knowledge, when he should learn the subject in its entirety. We trust medical publishers will discountenance their publication hereafter.

**The Physician Himself** and What He Should Add to the Strictly Scientific. By D. W. Cathell, M. D., late Professor of Pathology in the College of Physicians and Surgeons of Baltimore; ex-President of the Medical and Surgical Society; active member of the Medical and Chirurgical Faculty of Maryland; honorary member of the Lincoln Philosophical Society, etc., etc. Baltimore, 1882.

This is a very interesting and readable book, written by a Baltimore physician and published in that city. This fact of itself would naturally attract the attention of the medical reader, so seldom has anything of this character emanated from that source. From the title of the book the reader will perceive that it is not a scientific treatise on any of the departments of medicine, but yet its contents pertain to personal matters cognate to the profession. It is full of advice on little matters, many of which, if heeded at the proper time, would make the profession more popular and prevent much ridicule and disparagement. It is peculiarly a book for the young practitioner, containing as it does that character of advice he so much needs and which he has so much difficulty in obtaining. Without alluding to certain defects, which a second edition would naturally correct, we take pleasure in commending it to our readers as a book of practical value.

For sale by Cushings Bailey, 262 W. Baltimore street, Baltimore, Md.

**A Practical Treatise on Diseases of the Skin.** By Louis A. Duhring, M. D., Professor of Diseases of the Skin in the Hospital of the University of Pennsylvania; Dermatologist to the Philadelphia Hospital; Consulting Physician to the Dispensary for Skin Diseases, Philadelphia; author of "Atlas of Skin Diseases," etc. Third edition. Revised and enlarged
Philadelphia: J. B. Lippincott & Co., 1882.
Detroit: John McFarlane.

When the first edition was issued we expressed our good opinion of this work. The second edition improved the first by incorporating new articles and expanding others. This, the third edition, has been critically revised. The chapter on the Anatomy and Physiology of the Skin has been rewritten and elaborated to keep up with the recent studies in microscopy. The whole work has been enlarged, making the book a complete one on diseases of the skin. The book is handsomely issued by the publishers.

**The Experimental Method in Medical Science.** Second Course of the Cartwright Lectures of the Alumni Association, College of Physicians and Surgeons, New York. Delivered Jan. 24th, 31st and Feb. 7th, 1882, by John C. Dalton, M. D.
New York: G. P. Putnam's Sons, 27 and 29 W. 23rd street. 1882. Price $1.25.

These lectures having appeared in many of the leading medical journals have probably been read by most of our readers and by the profession generally and have been fully digested. Their appearance in book form from the press of the Putnams will give them a sense of perpetuity not generally found in journal articles, and to which they are entitled. The book is handsomely issued, and we commend it as a constituent part of a well regulated medical library, to be read.

**Fourth Biennial Report of the State Board of Health of Maryland.** Jan. 7, 1882.

"The health of the people is really the foundation upon which all their happiness and all their power as a state depend. The health of the people is, in my opinion, therefore, the first duty of the statesman, and I am confident that there is no object of higher importance to engage the interests of society."—Beaconsfield.

This is a well prepared report and shows that Maryland is giving particular attention to the health of her citizens. Dr. Kedzie's treatment of the drowned, with representations of the method pursued, makes it of additional value.

**The Atlantic Monthly.**

The June number of the old standard periodical closes Vol. 49, for 1882, and also contains a fine steel engraving of Longfellow. "Two on a Tower," "Dr. Zay," are continued from preceding numbers, and fully maintain the interest excited in reading the first chapters. The other articles are full of merit and are interesting. The July number will be a good one to subscribe with, and as we have read nearly all of the 296 numbers issued, we feel entitled to speak the card and to recommend it to our readers.

**Homœopathy—What Is It?** A statement and review of its doctrines and practice. By A. B. Palmer, M. D., LL. D., Professor of Pathology and Practice of Medicine in the College of Medicine and Surgery, University of Michigan. Second edition. 1881.
Detroit, Mich.: Geo. S. Davis, Medical Publisher.

That another edition of this work is so soon called for, is an evidence of the appreciation by the medical and popular reader of the exposition made by the author of the doctrines of homœopathy in his first edition. We trust this second edition will have as ready a sale as the first, for doubtless some good must come out of Nazareth.

**Electricity in Surgery.** By John Butler, M. D. Boericke & Tafel: New York, 145 Grand street; Philadelphia, 1011 Arch street. 1882.

This is another manual and treats of the whole subject in 111 pages, index included. That our readers may make no mistake, we will inform them the book is written from the homœopathic standpoint, and as such will be of more use and interest to those physicians and surgeons who embrace that faith. To such we cordially commend it. It is too restricted for general scientific aplication.

**The Students' Manual of Histology,** for the use of Students, Practitioners and Microscopists. Second edition. By Charles H. Stowell, M. D., Assistant Professor of Histology and Microscopy, and the Instructor in the Histological Laboratory of the University of Michigan. Illustrated by one hundred and ninety-two engravings.
Detroit: Geo. S. Davis, Medical Publisher. 1882.

We are gratified to know that the above work is so well appreciated, and that a second edition is so soon called for. Of course such a short time has elapsed since the issue of the first that no radical change is needed. Slight inaccuracies have been corrected and the proof has been carefully revised. We cordially continue to commend it.

**Michigan and Its Resources.** Second edition Compiled under authority of the State by Frederick Morley.

In a previous number we expressed ourselves on the value of this work. More material has been added and more information is given. Send to F. Morley, Detroit, for a copy.

**Transactions of the Meeting of the Kansas Eclectic Medical Association,** held Feb. 14-15, 1882, at Topeka, Kansas. Edited by J. A. Murek, M. D., Secretary for the Association, Topeka, Kansas.

A very creditable production.

**The Work of Health Officers** and of local Boards of Health in Michigan. Doc. 55.

**Annual Catalogue of the State Agricultural College,** Lansing, Mich. 1881-2.

**The Death-Rate of Memphis,** by George E. Waring, Jr., Newport, R. I. Reprint from American Architect.

**Annual Report and Statistics** of the Meteorology of the city of Oakland, California, for the year 1881. By J. B. Trembley, M. D.

**Prevention and Restriction of Small-Pox.** Doc. 54, issued by Michigan State Board of Health. H. B. Baker, M. D., Sec., Lansing.

**Transactions of the Medical Association** of the State of Missouri, at its 24th Annual Session, held at Mexico, Mo., May 17, 18 and 19, 1882.

**Fifteenth Annual Report of the Officers of the Detroit House of Correction** to the Common Council of the City of Detroit for the year 1881.

**Physicians' Catalogue,** 1882. For the city and country practitioner. Issued by D. G. Brinton, M. D., No. 115 S. 7th street, Philadelphia. Send to the publisher for a copy.

**Papers and Proceedings of the National Association** for the Protection of the Insane and the Prevention of Insanity; at the stated meeting held in New York city, Jan. 20, 1882.

**A Contribution to the Subject of Nerve Stretching.** By William J. Morton, M. D., New York. Reprint from Journal of Nervous and Mental Diseases, Vol. ix. No. 1. January, 1882.

**The American Journal of Stimulants and Narcotics.** A monthly magazine devoted to the scientific study of acute and chronic poisoning by alcoholic and narcotic agents. H. H. Kane, M. D., editor. Vol. i, No. 1. January, 1882. New York.

**On the Nomenclature and Classification of Diseases of the Skin.** By L. Duncan Bulkley, M. D., Attending Physician for Skin and Venereal Diseases at the New York Hospital, etc., etc. Reprint from Archives of Dermatology, Vol vii, No. 4. October, 1881.

**Third Annual Announcement of the Michigan College of Medicine,** Detroit, Michigan. Regular session commences on the first Tuesday in September, 1882, and will continue six months. Send to Prof. J. J. Mulheron, registrar, College building, corner of St. Antoine and Catharine streets and Gratiot avenue.

**A Statement** in brief of some of the circumstances and events which led to the arraignment before the Honorable Board of Regents of E. C. Franklin, Professor of Surgery in the Homœopathic College of the University of Michigan, with the action of the Board of Regents in the matter, May 3d, 1882. By Donald Maclean, M. D.

### The Manwaring Tables.

As there are no simple relations either between the different systems of weights and of measures, or their parallel denominations, the necessity for making comparisons through the common standard, the grain, occasions no small amount of calculation. The differences between officinal and commercial weights, wine and imperial measures, apothecaries' weights and measures as compared with those of the metric system, etc., are sources of continued annoyance.

In view of these and many other considerations, we propose the use of our tables of weight and measure equivalents, which are designed to greatly economize time and labor, insure accuracy, and reduce to simple multiplication nearly all calculations relating to weights, measures, monetary values, etc. Mere inspection shows the relations and equivalents of a unit of any given denomination, as also multiples of those in more constant use.

Among the many practical uses of the "tables" are the rapid estimation of costs, enlarging and changing the terms of formulæ, converting weight into measure or measure into weight, writing prescriptions in the metric system, converting metric weights and measures into their equivalents, etc., etc.

The following short methods indicate some of the advantages of using the tables:

How many avoirdupois ounces are sixteen troy ounces? Answer—1.097x16=17.5 avoirdupois oz.

How many troy ounces are fourteen avoirdupois ounces? Answer—.911x14=12¾ troy oz.

An article quoted at fifty cents an avoirdupois lb., what will seven troy ounces cost? Answer—4.8¾x=24 cents.

What is the value of fifteen grams of a substance at sixty cents an avoirdupois ounce? Answer—.0353x15x.60=31¾ cents.

How many grams are three troy ounces? Answer—31.1x3=93.3 gm.

A formula directs fifteen grams, what will be the number of avoirdupois ounces when multiplied twenty times? Answer—.0353x15x20=10.6 avoirdupois oz.

If the U. S. D. calls for six fluid ounces imperial measure, what will be the number of fluid ounces apothecaries' measure? Answer—.96x6=505 fluid ounces.

The "tables" are mounted on a thick tablet, 7½x9½ inches—white figures and black ground on one side, the reverse on the other. But little space is occupied, and the "tables" can always be in a convenient position for instant reference.

Sent by mail on receipt of seventy-five cents for the cards; sixty cents for the tables without the cards. Geo. S. Davis, publisher, Detroit, Mich.

---

EUCALYPTUS. This drug has been found by Mosler to have a marked effect in reducing the volume of the spleen. He found by accurate measurements that under the use of an extract of eucalyptus leaves the spleen decreased in all its dimensions. These experiments were performed on dogs, and would seem to indicate that preparations of eucalyptus are likely to be of value in the treatment of ague cake.—*The Druggist.*

## Therapeutic Progress.

PHILADELPHIA, ————, 1882.

*Mr. R. H. Cowdrey, Chicago, Ill.:*

DEAR SIR:—In reply to your esteemed favor of the 4th inst., we beg to state * * * *. Your journal is very presentable, well managed and must have considerable influence.

We notice that you take sides with those opposing trade-mark preparations. We think this is a short sighted policy with you, but in expressing ourselves in this manner we do not wish to be misjudged.

It is hinted that the manufacturers of elegant pharmaceutical preparations and specialties will agree to withdraw their advertising patronage from such journals as assail their interests. This is but a natural consequence, although it might not govern us, because we stand so high with the profession throughout the country it is needless for us to take issue. [Signature.]

The above is a private letter, and for this reason the signature is omitted.

It becomes us to define our position on the trade-mark, patent medicine and secret medicine system. The patent medicines we will leave for another article. On the trade-mark preparations we take this ground:

We object in all cases where a trade-mark covers the only name by which the article is known; in all cases where the trade-mark prohibits legitimate competition under the common name. Our reasons for so objecting are fully stated in the February number, page 45, in article on "Proprietary Medicines." As still further illustrating our reasons we append the following, which was sent to many, if not all, the pharmacists of this country:

"INTERESTING PROCEEDING—REPORT OF CASE FROM BUFFALO EXPRESS.—Christopher Rodenbach was yesterday arrested by a Deputy United States Marshall, on the complaint of Willis L. Gregory and Willis G. Gregory, charging him with infringing a certain trade mark or name, which had been duly registered pursuant to the statute, namely, "Syrup of Dover's Powder." The defendant was subsequently arraigned before United States Commissioner Scroggs, pleaded not guilty, and gave bail in $250 to appear for examination at 10 o'clock in the forenoon of the 31st inst."

Mr. Rodenbach is a respectable druggist, doing business at No. 942 Main street, in the city of Buffalo, N. Y. His years of study gave him no right to mix solutions of morphine and sulphate of potash and to these add fluid extract of ipecac mixed with simple syrup. And for so doing he is taken as a felon and placed in jail. Now, if, as pharmacists, we cannot be allowed to produce "Syrup of Dover's Powder," what is the reason? Simply because of the trade-mark system, which, in a quasi manner, you are advocating.

An article which was crowded out of our last issue will explain what we do believe in as applied to trade-marks.

To what extent can trade-marks be used before becoming objectionable to the pharmaceutical and medical professions? In answer to this let us take two prominent examples. Messrs. Wm. R. Warner & Co. use a trade-mark in the form of a cut, most generally printed in red ink, on their labels. Messrs. John Wyeth & Bro. have, we believe, no trade-mark, unless it be the label in the form of a shield. Now, these trade-marks meet our idea of what trade-marks should be, and almost reach the boundary beyond which they could not go. If, now, on the other hand, Messrs. Warner & Co. had trade-marked the sugar-coating upon the pills, and Messrs. Wyeth & Bro. had trade-marked their elixirs, they ought to have been at once branded

as secret or proprietary medicines, and not received the endorsement of the profession.

The sugar-coating of pills and the manufacture of elixirs require more science in the art of pharmacy, and, in the case of the pill coating, more expensive machinery than the hundred and one nostrums which are trade-marked ostensibly for this reason. Again, had either of these firms so trade-marked their preparations as to partially or wholly shut out competition, it would have been self-evident that they had no confidence in the superiority of their preparations and dared not meet legitimate competition.

As to the short-sightedness of our policy: It was but a few years ago that the city of Philadelphia boasted of her position as pharmaceutically far in advance of all others To-day we find the former supporters of this advanced pharmacy giving to the trade marked proprietary medicine combination their hearty support. The Pharmacist now says, thus far and no further shall you go without a protest from us. It is bad enough when our pockets are touched by many articles on our shelves, costing many dollars, having one-eighth or one-sixth their contents used and the balance to be charged to profit and loss. But as meekly as the pharmacists have borne this, it is going too far to force pharmacists to lie in jail that the trade-mark system may be perpetuated. Be it short-sighted, if you will, but The Pharmacist proposes to win.

When this matter is settled, we predict that you will have changed the one or two articles which are now objectionable, and will have for us the respect which honest opinion always commands.

As to the covert threats—under ordinary circumstances we would not notice them; in this case we feel that their intention was not unkind, and in answer we will say: We have given you our platform; on that we propose to stand and oppose all who do not meet its requirements. In the meantime our columns are open to all who wish to take advantage of our pages.

However concise our statements may be, we intend to attack no one maliciously or to take unfair advantage. There is our standard, and close after it will be found The Pharmacist and Chemist, advertisements or not.—*Pharmacist and Chemist*, April, 1882.

---

On the Treatment and Prevention of Hay Fever.—The appearance of an article on the "Treatment of Hay Fever," from the pen of Dr. Thorowgood, in the Lancet of July 16, has led me to desire to lay before the readers of this journal some of the practical conclusions I have arrived at after a tolerably long course of experimental investigation of the subject. Dr. Thorowgood has mentioned my name at the commencement of his article, and as my experience does not permit me to draw quite the same conclusions he does on one or two points, I am anxious to bring the results of this experience under the notice of the profession:

There can be no doubt now that hay fever is caused by pollen in the atmosphere, and, consequently, that if a patient can get on to the open ocean, and can keep a good distance from land, he will escape the attacks, the reason being that in this situation the atmosphere is free from pollen. Few hay fever patients can, however, afford to spend a tenth part of each year in the enforced idleness such as a voyage would entail. This was exactly my own case, and this circumstance led me to persevere in the search for remedies for hay fever, as well as for some means of preventing the contact of pollen with mucous membranes. I know now by practical experience that a combination of drug treatment with the use of mechanical means of prevention, in the shape of nasal respirators and gauze-guarded spectacles, will rob hay fever of fully nine-tenths of its severity. Dr. Thorowgood, however, seems to have the idea that "mechanically to protect the mouth, nose, and eyes from the impact of pollen is so inconvenient and irksome that few would care to submit to it except for the sake of experiment." As a matter of fact this is not the case, and this is one of the points upon which my conclusions differ from those of Dr. Thorowgood. And here it is necessary to observe, in passing, that in the great majority of cases of hay fever there will be no necessity for having the mouth covered. In the greater number of instances the catarrhal symptoms are the first, and often the only, signs of derangement; and if asthmatic symptoms show themselves at all, they do so only after the disease has existed for some time. In many cases, moreover, the asthmatic condition is not well marked at any period.

Since I have adopted my present plan of dealing with the malady by the use of the mechanical means of prevention along with the internal administration of medicines, I have proved that hay fever can be kept at bay. There is no difficulty whatever in using the gauze-guarded spectacles, and if the nasal respiratars are accurately fitted, so as to follow all the curves of the mucous membrane of the nares, a short training will enable a patient to retain them *in situ* for eight or ten hours a day with comparative comfort.

A reference to the second edition of my work on hay fever* will show that I have used both these modes of protection, experimentally, and purely as a means of prevention for some years. In addition to two or three years devoted to preliminary trials, I have just now completed my third season of successful prevention of hay fever. With greater care and increased experience I have this year been almost as free from the disease as at any period of my life. I have also similarly favorable testimony from other patients who have been under my care. One of these, who was equipped at the commencement of last year, has now passed through two hay seasons with an almost entire freedom from the disease, although out in the open country occasionally for several days at a time. Another patient, equipped at the commencement of this year, gives the like favorable testimony. In this case the patient lives in the centre of a district in which an enormous quantity of hay grass is grown. In former years, in addition to the very acute catarrh she always had during the season, the asthmatic symptoms were often so severe that they compelled her to remain in the house, with the doors and windows closed, sometimes for days together. This year she has been able to be in the open air almost every day with an entire freedom from the catarrh, and with not a tenth of the suffering she has had in former years from the asthma. In supposing that Mr. Burroughs, of Snow Hill, is the inventor of the nasal respirators to which he refers, Dr. Thorowgood is laboring under a mistake. The invention, if such it can be called, is my own, and has, as I have stated above, been used in my experiments for some years with almost every kind of fibrous material as an intercepting sieve. The apparatus in question is an American production, and is imported from America by Mr. Burroughs. Its greatest defect is occasioned by the idea that an apparatus of this kind can be made wholesale to fit the nasal aperture of any and every sufferer. In shape and in dimensions the nasal cavities of no two people are exactly alike, nor indeed are the two sides ever alike in the same individual. To be of any service, therefore, each respirator must be made to fit, the respective nasal cavity of each patient, and any attempt to use such as have not been so adapted must inevitably lead to annoyance and irritation.

For the details of the medicinal treatment of hay fever, I must refer the reader to my work, but I

*Hay Fever: Its Causes, Treatment, and Effective Prevention. By Chas. Harrison Blackley, M. D., London: Baillière, Tindall, and Cox.. 1880.

may, before concluding my remarks, make one or two observations on the subject, and also on the use of the mechanical means of prevention. If it is intended to use these latter, it is important for the patient to be equipped some weeks before the hay season comes on, so that he may get well accustomed to the use of the respirators before any irritation is set up by the presence of pollen in the atmosphere. To attempt to do this after the disease has once fairly set in can only lead to disappointment.

The purely medicinal treatment of hay fever may be divided into the prophylactic, the palliative, and the curative. In following out the first of these, it is of the highest importance that the treatment should be commenced some time before the hay season comes on. To allow the malady to get fully established before treatment is attempted is to lose more than one-half the benefit that well-directed prophylactic treatment will confer, whilst at the same time it increases the difficulty of using palliative and curative treatment with good effect. —Charles Harrison Blackley. M. D., in *The Lancet*, Aug. 27, 1881.

---

On the Treatment of Chancre by Glycerinum Boracis.—The experience of the last few years has satisfied me that in various forms of skin disease a simple non-irritating antiseptic application frequently leads to a speedy recovery. Amongst the antiseptic substances with which I have experimented I may instance one that I believe will be found eminently useful in cutaneous affections. As an example of its beneficial action I propose to relate the history of three cases of chancre treated by glycerinum boracis, with results that I feel sure will encourage practitioners to give the method of treatment a more extended trial. I was induced to try this application by its good effect in the first case which I shall relate. As I did not take notes of the case I describe it from memory.

*Case* 1.—In February, 1881, a man brought his wife to me and gave the following history. When on a visit to Paris he had contracted several chancres, which were cauterised and seemed to heal quickly. On his return to London he infected his wife, but his desire to conceal from her the nature of her malady led to delay in seeking advice. Eventually she had been placed under medieal care and subjected to the ordinary routine treatment for chancre. She had had the sore cauterized on three different occasions, at intervals of several weeks, and had applied continuously water-dressings and black wash. Caustic had been last applied about a week before I saw her. She described her condltion as being worse since the application, and complained much of the pain. The sore had latterly been steadily enlarging. I found a chancre as large as a sixpence at the entrance of the vagina on the left side. It was covered, except at the edges, with a black, sloughy-looking mass. The edges were white and irregular, and the border of the sore was considerably inflamed. The sloughing appearance of the chancre, and the inflamed base, naturally suggested to my mind the action of a poison which was rapidly multiplying itself, and on the chance of the poison being parasitic—being a "germ"—I bethought myself of an anti-parasitic (or antiseptic) remedy and directed the sore to be kept bathed in glycerinum boracis. The rest is soon told. With the borax solution the inflammation speedily subsided, the surface became clean, and the ulcer healed without a troublesome symptom. While this sore was being successfully treated a vesicle appeared on the four chette. It soon ruptured, and left a small chancre, which did not spread laterally, but penetrated into the tissues. When my attention was called to it, a probe passed inward for a quarter of an inch. I directed a solution of carbolic acid in alcohol to be applied, but this failed to get to the bottom of the sore, which continued to get deeper. I then procured proper instruments for the patient, and instructed her attendant how to plug the narrow channel with cotton wadding soaked in glycerinum boracis. From that time the canal-like sore began to fill up from the bottom, and soon healed completely.

*Case* 2.—A commercial traveler contracted a number of chancres about the middle of July, 1881. There were four on the glans penis, one on the frænum (which it destroyed), and two on the prepuce. Phimosis supervened, and on August 1st he laid up for treatment whilst on a provincial tour. Zinc ointment and black wash were applied, but the inflammation increased. About the second week of August he observed that there was also urethral discharge, and at the same time an inflamed gland in the right groin suppurated and eventually discharged. The sores were now painted with tincture of iron, which improved their condition. In the first week of September caustic was applied to them, with the effect of great increase of the inflammation. When he came to me on Sept. 24th, he had phimosis, with considerable pain and swelling, and it was impossible to retract the foreskin sufficiently to see all the sores. One on the glans penis, which was brought into view, was covered with a dark-grey membranous looking substance. I directed him to insert with a blunt probe pieces of lint soaked in glycerinum boracis, so as to keep the glans and inner surface of the prepuce completely bathed in the solution. When I saw him five days afterwards, I was able to retract the foreskin completely, and I found all the sores clean and healthy. When he came a third time a week afterwards, they were nearly well. He did not find it necessary to visit me again, but I subsequently learned from him that a few days after his last visit he was perfectly well.

*Case* 3.—A powerfully built young man, an engineer, consulted me on September 25th, 1881, and gave the following history. In the beginning of July he contracted a chancre, for which he was treated at first by a chemist, who salivated him without any effect having been produced on the chancre. He had then consulted a medical man, who burnt the chancre with caustic on three occasions, and directed the constant application of black wash. In spite of these measures the sore refused to heal. When he came to me I found a nearly circular sore about a third of an inch in diameter on the inner surface of the foreskin, having a grevish surface with a few red points. I ordered the constant application of glycerinum boracis. In two days the aspect of the chancre had changed, and it wass less irritable. In a week it was well.

I trust that the results which I have described will lead to a more extended trial of this simple treatment. The theory on which the method was conceived was that of keeping the surface of the sore saturated with a solution that would effectually prevent the development of organisms. Those who may feel disposed to try the remedy will, however, judge it by its efficacy in converting a poisoned into a healthy sore, and will not be prejudiced by theoretical ideas regarding the pathology of chancre. If opportunity unfortunately offered, I should feel encouraged to urge a trial of this remedy in phagedæna and hospital gangrene. The well-known efficacy of the continuous bath in the latter disease possibly owes its power to the arrest of the development of micro-organisms—an effect that is attainable by the free and constant application of glycerinum boracis.—Dr. Geo. Thin in *The Lancet*, May, 1882.

---

Influence of Anæsthetics on the Heart, and on the Antagonisms of Poisons.—Dr. Ringer has recently published two papers (Practitioner,

June and July, 1881), which throw considerable light on the action of anæsthetics on the heart and incidentally on the vexed question of antagonism. The observations were made with Roy's apparatus, a description of which will be found in Dr. Roy's paper "On the Influences which Modify the Work of the Heart" (Jour. of Physiol., vol. i, p. 462). Considerable difficulties have hitherto been experienced in working this apparatus, arising chiefly from the inconvenience of having to obtain fresh blood for each experiment.

Dr. Ringer finds that the desiccated defibrinated Bullock's blood, imported from Parke, Davis & Co., of Detroit, Michigan, U. S. A., answers the purpose admirably. It can be readily obtained, as it is frequently used for enemata in cases of gastric ulcer, etc. For physiological purposes it is dissolved in distilled water, and then diluted with saline, one part of blood-mixture being used to two of salt solution. In each experiment three ounces were used, the same blood being employed in the same series of observations, so that the poison and its antidote were intermixed.

Chloroform acts powerfully on the ventricle of the frog's heart. Like lactic acid, muscarin and jaborandi, it lessens both the height and duration of trace until, finally, the heart is arrested in diastole. In one experiment, a minim of chloroform nearly stopped the ventricle; and when the heart had almost ceased beating, the addition of ten-minim doses of strong solution of ammonia at once restored its action, until the contractions became almost as powerful as at first. The addition of ten drops of chloroform, demonstrates most conclusively the mutual antagonism existing between chloroform and ammonia.

It is clear that chloroform does not arrest the ventricle by stimulating the inhibitory apparatus, for the portion of the heart employed contains no inhibitory nerves. Chloroform clearly paralyzes the muscular substance of the heart, for it is well known that the muscular tissue will beat rythmically without the presence of nervous ganglia. It is evident, therefore, that, did the chloroform paralyze only the ganglia, the ventricle itself would still continue to beat. Further experiments made with the lower half only of the ventricle render this certain, the ganglionless and nerveless portion being affected in exactly the same way as the whole ventricle.

Atropia does not antagonize the action of chloroform on the ventricle; nor will the previous addition of atropia prevent the action of chloroform. Ethidene-dichloride affects the ventricle in exactly the same way as chloroform. Ether affects the heart in a far less degree than either chloroform or ethidene-dichloride. Large doses accelerate the heart's action, and make each beat a little weaker; but the amount of work done is considerably greater, the increased frequency more than compensating for the diminished force of each contraction. Ammonia and ether, like chloroform and ammonia, are mutually antagonistic as regards the whole ventricle. Bromide of ethyl arrests the ventricle acting on the muscular substance. It is far less powerful than chloroform, but more poisonous than ether.

Iodoform and ammonia are mutually antagonistic, as shown by their action on the ventricle. A fifth of a grain of iodoform nearly stopped the heart, and then ten-minims of a one per cent. solution of strong ammonia restored the contractions, which were again arrested by another dose of iodoform. This was repeated on the same heart three successive times.

The importance of these observations cannot be overestimated, throwing as they do a new light on the whole subject of antagonisms. Rossbach (Pflüger's Archiv., Band xxi, Heft 1, page 1, 1879) contends that drugs are never mutually antagonistic. He maintains that when a tissue is paralyzed by one poison, it is impossible to stimulate it by another. For instance, whilst atropia, he says, antagonizes pilocarpine, pilocarpine cannot antagonize atropine; atropia paralyzes the sweat apparatus, and pilocarpine is no longer able to stimulate it into action. He admits that after small doses of atropia pilocarpine can produce sweating, and this he explains by assuming that atropia paralyzes first the nerve of the sweat gland, and later, the gland apparatus itself. After a small dose of atropia the nerve only is paralyzed, and then the pilocarpine can still stimulate the glandular cells; but a large dose of atropia paralyzes the cells also, and then pilocarpine is powerless.

Dr. Ringer's recent experiments demonstrate the fallacy of this argument. The lower half of the ventricle consisting of only one substance, muscular tissue, so that the antagonism cannot be due to an action on different structures.—*London Med. Record*, Oct. 15, 1881.

---

The Physiological Action of Blood-Letting.—The unquestionable effect of local depletion in relieving some forms of inflammation appears to have been confirmed and explained by the recent researches of Dr. Genzmer, of Halle (Centr. f. d. Med. Wiss., April 1, 1882). This observer has found that when inflammation has been set up in the web of the frog's foot in the usual way—say by means of a hot wire or by caustics—and the process is watched under the microscope, it is possible to remove the stasis, to empty the blocked vessels, and so far to relieve the inflammation by applying a leech to the limb of the animal between the lesion and the heart. The actual phenomena attending the resolution of the inflammatory process prove, however, to be the very opposite of what might have been expected. Instead of producing anæmia of the affected area, leeching leads to hyperæmia of the part by drawing the blood from the blocked vessels, and allowing a full and rapid stream to flow once more through them. Thus the leucocytes, clinging to the walls previous to diapedesis, are swept away in the blood-current; and one of the elements of inflammation is rapidly removed. But the abstraction of blood causes more than simple resolution. It is manifest that the free influx of blood into the inflamed area—that is, the hyperæmia—must restore the nutrition of the part, the reduction of which constitutes another of the factors of inflammation. Whether or not the leucocytes which may have already escaped from the circulation into the tissues pass back into the vessels, Dr. Genzmer is unable to say. Results similar in kind, but less marked in degree, followed scarification, instead of leeching, between the inflammatory focus and the heart. Distant venesection produced a decidedly less distinct influence. The results of these observations are decidedly valuable, but their importance must not be exaggerated. In the first place, as Dr. Genzmer remarks, they account for the effect of leeching above the seat of inflammation, not at or over it; secondly, they cannot be said to apply to venesection in visceral inflammations; and, thirdly, they do not explain the action of leeching or of venesection in the cases where these measures are clinically practiced with most success—for example, in cardiac distress or in uræmia. It is possible that the antiphlogistic action of a poultice in inflammation may be the same as the local effect of leeching which has just been described, namely, the reduction of stasis, and the promotion of a free flow of blood through the damaged tissues.—*Medical Times and Gazette*, May 13, 1882.

---

To the Medical Profession.—The Pharmacist desires to know what is your code of ethics,—to what are you willing to subscribe? We were formerly somewhat certain of what your code of

ethics was, but recently we have had so many of the old pillars of the "æsthetic" structure rudely demolished that we have to ask for information as to the portion that does remain. Does your code of ethics forbid you to prescribe a patent medicine —a medicine the working formulæ of which is unknown, the ingredients of which, in their exact proportion, are not known? A medicine, the name of which can be used only by the manufacturer?

Is it in accord with your code of ethics to prescribe Listerine, Sapoline, Purifinis, Bromo Chloralum, Lactopeptine, Firwein, Diphtherine, Dextro Quinine, Bromidia, Iodia?

Is it necessary for you, in order to conform to the code of ethics, to know what is in the medicine you prescribe? If so, what are the ingredients of any or all of the ten articles mentioned above? Could you and a practical pharmacist produce the same by applying all your knowledge of it together with his pharmaceutical knowledge?

If not necessary to know what you are prescribing, is it contrary to the spirit of the code of ethics to prescribe Jayne's Expectorant, Bull's Sarsaparilla, Helmbold's Buchu, Injection Brou, Tarrant's Extract of Cubebs and Copaiba, Warner's Kidney and Liver Cure? If this is not contrary to you code of ethics, why do you object to the druggist selling them?

The Pharmacist truly states that it does not know on what code of ethics the medical profession stands, and is all at sea when it attempts to set a bound beyond which the medical profession will not go.

Gentlemen, is this not true? and is it not your duty to help your brother profession to the extent of defining your position?—*Pharmacist and Chemist*, April, 1882.

## New Remedies.

AVENA SATIVA AS A SPECIFIC FOR THE OPIUM HABIT.—Almost since the first record of the opium habit appeared in the famous "Opiologia" of Wedel or Wedelius, in 1674, the history of the subject has been punctuated, here and there, by the appearance of various specifics by means of which a rapid and easy cure of this affection was assured. The uniformity with which these much-lauded nostrums or simples failed to accomplish that which was claimed for them seems to have been their distinguishing feature, and this peculiarity holds good in the case of those so often discovered at the present day. Not alone the history of this habit but that of medicine teems with records of the birth and death of just such specifics, and the severe blows thus often administered were unquestionable factors in so shaping the professional mind that rational medicine was able to attain and retain a foothold.

Had the cause of these so-called specifics been championed by the weak-minded, ignorant or vicious members of the profession alone, we should feel less surprise than we do when we know that men whose ability and honesty were undoubted, had, like the less able and less honorable, been their strong upholders.

To those who have studied the subject of the opium habit at all carefully or thoroughly, the fact that no one remedy can prove specific in the conditions that arise in the course of the sudden or gradual withdrawal of opium or morphia from one accustomed to its habitual use, is at once apparent. For we recognize during habituation, either a condition of diminished functional activity in the spinal, and increased functional activity in the sympathetic nervous system or the direct opposite, according to the length of time taken, the amount used, idiosyncrasy of the individual, etc., etc., passing at once, on deprivation, into a state (a) of sympathetic and cerebro-spinal irritation (b) of sympathetic paralysis and (c) of a return to the normal through a regularly graded stage of irritation or hyper-stimulation of the sympathetic.* That any one remedy can meet and wholly overcome or prevent the appearance of the symptoms indicative of these conditions, is, upon the face of it, absurd. The very fact that this remedy is curative in both paralysis and epilepsy of traumatic origin should be sufficient to show that its physiological action must be such as to negative its usefulness in the opium habit.

In the cases offered by Dr. Sell as proof of the efficacy of avena sativa in the treatment of the opium habit we find several of the usual sources of error. In the first place it has been proven beyond any question whatever that the word of a patient and that of a patient's friends (whom she so often deceives), must never be taken as worth anything in matters of this kind, more especially as regards the question of the amount of morphia used, and the freedom of the individual from the vice. In one of his four cases, a very meagre showing upon which to base a claim for the specific action of any remedy in this affection, Dr. Sell takes the patient's word, in another, that of the patient's husband. If the doctor at the time of writing his article knew as much of the case of Mrs. L. as I do,† I do not think he would have offered it in his paper. What is meant will be seen from the following letter just received by me from a reputable and accomplished medical man who resides and practices his profession in the town where Mrs. L. lives.

"Dear Doctor:—I have some doubt if Mrs. L., to whom Dr. Sell refers, was ever in the habit of using opium very largely, though very likely habitually.

"Mrs. L. is now getting from one of our druggists about every three weeks, a cholera mixture containing

℞ Tr. op., ʒ j
Tr. Camphor, ʒ j
Tr. capsici, ʒ ssj
Ess. menth. pip., ʒ ss.

"If this is all, the use is very moderate but still habitual, she having done this for three or four years at least. Of course the purchase does not prove that she uses it, but from the knowledge I have of the family and their surroundings, I have no doubt she uses it herself. I do not believe that she uses the drug very largely, but she may alternate between the druggists here (two) and so use double this quantity. Dr. Sell was here some six years ago. The cure was of very short duration.

"Mrs. L. is an excellent woman, widow of a clergyman, and is in very moderate circumstances, which may account somewhat for the moderate use of the drug," &c.

Cases 1 and 3 prove absolutely nothing.

Thus the efficacy of avena in this affection rests upon one case, the history of which is incomplete and unsatisfactory, and lacking that kind of proof that is necessary in so important a matter. To be absolutely certain that a person addicted to this habit is using no morphia, he or she must be in some public institution, having been thoroughly searched prior to or just upon entering, must be under the care and watch of a skilled nurse, day and night for at least one week, and be seen several times daily by a physician who understands just how every particle of morphia influences pulse, temperature, pupil, urine, mental activity, etc., etc. Even then the cunning of the patient, far

*For a complete study of the conditions of the sympathetic, vaso-motor, and cerebro-spinal nervous systems that obtain during the period of abuse and the three stages of abstinence. I would refer any one desirous of investigating the matter to my forthcoming work on "The Effects of Opium Abuse and Abstinence on the Nervous System," to which is appended the first annual report of the De Quincey Home.—(*In Press*).

†Dr. Sell, at my request, very kindly gave me the name and address of Mrs. L.

surpassing that of insanity, may serve to outwit the physician for a day or two.

Patients on entering our institution for treatment have had morphia concealed in the rectum, vagina, hair (women), sewed into the waist band of dresses, lining of corsets, and other parts of the dress. It has been cleverly substituted for the lead in a pencil, ink in stylographic pens, colored and used as tooth powder, and in many other quite as curious ways. This too, in the case of those who came voluntarily.

My attention was called to avena sativa about a year ago, and since that time I have tried it alone and with other remedies, in large and in small doses, in hot and in cold water, in mild cases and in severe ones, and invariably without any appreciable effect in anyway modifying the period of abstinence. In not a single case was a patient able to substitute the avena for the morphia, even when taking as little as four grains of opium daily, by the mouth (in the form of paregoric).

Against the four (three of which are wholly worthless), all of which are loosely observed and regarded, offered by Dr. Sell as evidence in favor of avena, I offer 29 cases, from which as nearly as was possible, every known source of error was eliminated. In not one did I obtain any benefit, and the temperature of the period of abstinence, that most delicate test, fell, suddenly rose, remained stationary, to fall gradually if no morphia was given (very rapidly and below the average if any was obtained by cunning), until the temperature of health was reached, wholly unaffected by the use of large or small doses of avena. So, too, the pulse. I would say further that several of my nurses have watched these cases with me and can testify to their accuracy.

Even in the opium smoking addiction, that easiest of all forms of the habit to cure, no benefit was experienced. Indeed no effect whatever.

If the avena was what is claimed for it, its value to the poor, helpless victims of this habit would be incalculable, and no one would welcome such a remedy more heartily than I would. It is and has been my daily labor and experiment and my nightly thought for the past four years to discover some such agent, and if I thought that it existed I would gladly close the doors of my institution and publish to the world this remarkable advance in therapeutics. I am here in no way endeavoring to impeach Dr. Sell's veracity or honesty of purpose, but I simply claim:

1st. That he has not tried the remedy in enough cases (even if all four were successful) to establish the virtues of the drug.

2nd. That the four cases are, for many reasons, inconclusive and have led him into error, and,

3d. That Dr. Sell's mode of investigating and experimenting, his use of the drug in other cases, and his reasoning from them are unscientific and unreliable.

In conclusion, I would say that I have patients here now upon whom the drug has recently been tried and who can now be seen; that there are others here who would willingly try it until their sufferings became unbearable, (which should not be the case if the drug is what is claimed for it), and that any information bearing on this question will be thankfully received and duly sifted.—H. H. Kane, M. D., in the *Medical Gazette.*

---

VIBURNUM PRUNIFOLIUM.—In the January number of the Journal, Dr. Carson speaks of the excellent properties possessed by this agent. Yet he, like a majority of others, has not confidence enough in it to try it alone, but when relief is obtained by the use of his compound he gives viburnum prunifolium the glory.

Now if it takes a combination of two or more agents to relieve a condition, let us give the compound the praise and not a single agent of the compound; let us study our cases closely and if one agent will relieve give no other; and where we want to test the virtues of an agent as a specific for any condition use it alone.

This agent has long been used by some of the older physicians, but until recently, it has not claimed the attention of the profession generally, and with a hope of leading some one to test its virtues, and thereby appreciate what I believe to be its excellent qualities, I will give my experience with a few cases:

Case 1. Mrs. P., æt. twenty-three, with a fair combination of temperaments, had been married about two years, previous to which time she had enjoyed good health, but soon after her marriage she commenced suffering from dysmenorrhœa which gradually grew worse and became complicated with menorrhagia which also gradually grew worse until the menstrual period continued from fifteen to twenty days.

At the time I was called to see the case she had been treated by Dr. T., for one year but to no effect, as the case grew constantly worse, and was so reduced that but little hope was entertained of her recovery by her family and friends. At the time of my first visit was the commencement of her menstrual period and I found her suffering intensely.

℞ Lobelia pulv., grs. x
Dioscorea, grs. x.

Mix Chart. No. 5, one every half hour until severe pain is relieved; also viburnum prunifolium fluid extract ʒ ii. Half teaspoonful three times per day until a few days previous to expected menses, then four times daily. The suffering was mitigated and the time that menstration had continued was greatly shortened; the prescription was one-fourth teaspoonful three times a day.

The succeeding menstruation was normal as to duration, and accompanied with but little pain, and that at the commencement; the second was normal and the woman almost restored to her usual health.

Case 2nd. Mrs. S., nervous temperament, æt. thirty-five, had borne several children, but the last two pregnancies had terminated in miscarriage at about the fifth month; she was again in the fourth month of pregnancy with strong symptoms of miscarriage, severe pain, profuse mucous discharge, streaked with blood.

℞ Virburnum prun., fl. ext. ʒ ii.

Half teaspoonful every three hours until symptoms subsided, then one-fourth teaspoonful three times per day. After taking about two-thirds of an ounce, relief was obtained. This prescription was kept constantly on hand, and when the symptoms became aggravated it was taken as directed once in three hours, when relieved, three times per day when symptoms, were mild, and to be left off entirely when feeling at ease; under this treatment she went to her full time and was delivered of a fine healthy child.

Case 3. Mrs. H., æt. forty-five, lymphatic temperament, had suffered from irregular menstruation accompanied with menorrhagia, which for a few months had continued the greater part of the month.

℞ Viburnum prun., fl. ext. ʒ ij
Syrup simplicis, ʒ ij.

M. Teaspoonful once in three hours until relieved, then half teaspoonful three times per day; but her extreme dislike to taking medicine caused her to discontinue its use after she had obtained relief, but a continuation of the same prescription during the menstrual period for a few months was sufficient to regulate the excessive flow, but not entirely the time, owing to the expected changes at this period in life.

Case 4th. Mrs. D., æt. twenty-seven, nervous

temperament, was taken with pain in uterus which continued all the time with soreness, but the pain became more severe each afternoon. The character of the pain led me to believe the case to be one of neuralgia of the uterus.

℞ Viburnum prun., fl. ext. ʒss.

Half teaspoonful once in two hours; relief was soon obtained and she did not again have a recurrence of the pain.

Case 5th. Mrs. H., lymphatic temperament, æt. 35, borne four children, again pregnant in the second month, had been troubled with severe pain in abdomen, with sickness of stomach; under proper treatment the pain subsided, but sickness continued with greater severity, the patient being unable to sit up any time during the day without an effort at vomiting.

℞ Viburnum prun., fl. ext. ʒss.

Ten drops in a teaspoonful of water every two hours. Was relieved after a few doses, and was on the street the next day and had no further trouble at that time. The sickness again returned after a few weeks, but was qickly relieved by a continuation of the same prescription.

Case 6. Mrs. R., married, æt. fifty-five, temperament nervous, never borne any children, had been troubled for the past fifteen years with menorrhagia and dysmenorrhea, and at two different times in her life had suffered from vicarious menstruation from the lungs, with strong indications of a third attack at the time I was called to see her, these attacks making their appearance, when from some cause the menses were delayed in their appearance. The drain on her system during the menstrual period had been so excessive as to necessitate her keeping her bed the greater portion of the time, when her age would indicate that she should have ceased menstruating several years prior to this time, and that if the generative organs were in a healthy condition it would no longer continue.

℞ Viburnum prun., fl. ext. twenty drops every three hours. The menses appearing but three times slightly after this period, having her to take of the viburnum when symptoms of menstruation appeared. Her strength and general health improved rapidly after having relieved a malarial affection that was also troubling her at the time I was called.

I have used it in many other cases, but these already given are sufficient to give an idea of its range of use, the agent has been one of great worth in my hands in meeting these uterine difficulties and with the hope of aiding others, I submit this as a friend of progressive medicine.—A. S. Huston, M. D., in *Physio-Medical Journal.*

---

GRINDELIA SQUARROSA.—The grindelia squarrosa is one of the new California remedies introduced to the profession by the enterprising drug house of Parke, Davis & Co., and is without question one of the most valuable of the recent additions to the materia medica.

About three years ago, I began to experiment with the drug, and from the first was very much pleased with its action. Shortly after beginning its use, I reported a few cases treated by it, illustrating its action, in an article to the American Medical Journal, in which I spoke of its value in enlargement of the spleen. Since then I have used it in many such cases with remarkable success. It seems to possess a peculiar affinity for that organ, and so far as I have tried it, have found it curative in every case in which it was used. If every article of the materia medica, or even a small fraction of them, gave as certain results as this remedy, the practice of medicine would be a pleasure indeed. Without exception, no drug has ever given me more uniform success in its use than the grindelia squarrosa. Its effects are often brilliant, acting like magic. It not only relieves quickly, but, in the majority of cases, effects a permanent cure in a short time. It is not a remedy that must be administered for days and weeks before any good effect is perceptible, but usually three or four doses are sufficient to produce a noticeable change in the feelings of the patient

On account of its direct action on the spleen, and because the spleen is almost always involved in malarial troubles, it becomes one of the first and most reliable remedies in malarial diseases. However, it is not a specific in every case of miasmatic poisoning, but only in such as present certain symptoms, which will be noted further on. Next to quinine it is better than any other single remedy in malarial diseases, and in some such cases will cure when quinine is of no benefit whatever. When the symptoms are present indicating its use, it will as certainly relieve the disordered conditions upon which they depend as that it is given. In certain cases of ague, the grindelia is as truly antiperiodic in its action as is quinine, promptly interrupting and ending the chills. The physician to whom its action is familiar will not do without it.

The symptoms calling for its use are pain in the left side in the region of the spleen, in front or just under the short ribs. Pain in the left side is the indication for its use, and may be the only evidence of diseased action. Usually in bad cases it is accompanied by an enlargement and tenderness of the spleen, and a sallow complexion. If these symptoms exist, the grindelia is sure to cure. I have seen patients who had suffered for months in this manner, cured in a few days with this remedy. Under its use the sense of relief is very prompt and decided. It not only acts upon the spleen, but, in a measure, influences all the organs that are connected with the portal circulation. Its action upon the liver and associate viscera is evinced by its power to relieve biliary obstruction, improve the digestion, and clear the complexion. Although ordinarily not a cathartic, its action under the conditions named noticeably affects the bowels, and not infrequently causes free alvine evacuations. This effect is doubtless due to an unloading of biliary and other extraneous matter from the portal circulation, which acts as a mechanical irritant in its passage through the bowels. Given, a case of malarial disease presenting the symptoms of pain in the left side, with enlargement and tenderness of the spleen, the grindelia is a certain remedy. To any one who has never witnessed its good effects, its action when first seen is a happy surprise, as several physicians have told me to whom I suggested the remedy.

In later experiments I have learned that the pain in the left side does not necessarily have to be in the spleen. The remedy seems to be applicable to any pain in the left side extending as low as the hip and as high as the nipple, and may be either a slight soreness, a dull aching, or keen, cutting pain. The character of the pain is of less importance than its location. The more nearly that the pain is located centrally in the left side, the more marked will be the action of the remedy. In not a few instances have I likewise relieved cardiac and pleuritic pains, but cannot tell why the drug proved curative in these cases, unless it was owing to its location—pain in the left side. Having met with such wonderful success in these cases, I now prescribe grindelia squarrosa for every patient that complains of pain in the left side.

My usual prescription is as follows: Fluid extract grindelia squarrosa, two drachms; glycerine, two and a half ounces; alcohol, one ounce; mix. Dose, a teaspoonful every four hours.

Either more or less of the grindelia may be used, in the proportion of one to four drachms in a four-ounce mixture, as may be necessary, according to the age and condition of the patient.

In my experiments with this drug, I have had

not a little trouble in obtaining a pure article. I have used several different preparations, but whenever I used anything other than Parke, Davis & Co's fluid extract, I was invariably disappointed in the results. I simply make this statement as a matter of fact, and to protect myself from misinterpretation by those who will test this remedy, but who fail to get any good effect because of their using an inferior or worthless article. I fully appreciate the importance of the physician's using reliable drugs if he would do a successful business, and nothing has opened my eyes to the frauds practiced upon physicians by druggists, like my experience with cascara sagrada and grindelia squarrosa.—Dr. J. A. Munk, *Proceedings Kansas Eclectic Medical Association*, 1882.

---

Papaw in the Treatment of Chronic Eczema.—The so-called papaine, the partially purified extract obtained from the papaw tree, was recommended at the International Congress last year as a solvent of diphtheritic false membrane. I have lately been using it as a local application in old-standing cases of chronic eczema, more especially of the palm. As it is used in the West Indies to soften tough meat, I thought it might be of service in cases the chief feature of which is thickening and hypertrophy.

It would occupy too much space to discuss the method of action here; it will be sufficient to say that it is supposed to digest certain substances by means of a special ferment. Roughly speaking, it may be said to resemble pancreatine. I have had such marked success with it, that I recommend it to the profession as a remedy worthy of trial in cases which often resist all the ordinary modes of treatment.

The following brief notes of a case recently treated may be of interest. Mrs. R., was sent to me by Dr. J. E. Pollock, last June. She was suffering from severe chronic eczema of both palms, which completely resisted the external use of tar, and mercury ointments of various kinds and strengths, as well as a six months' course of arsenic, and was only slightly relieved by prolonged soaking. On April 18th, I ordered 12 grains of papaine and 5 grains of powdered borax, in two drachms of distilled water, to be painted on the parts twice daily. When seen on May 9th, the hard horny masses of heaped-up epidermis, which were present on April 18th, had entirely disappeared from the skin, covering the heads of the metacarpal bones, leaving its texture quite normal. The fissures of the central portion of the palms had quite healed, and the cuticle was softened and pliable, though still showing signs of roughness.

The patient stated that the application produced only a slight pricking and tingling sensation. No internal remedies were given. The borax was added with the view of checking fermentation, and supplying the alkali required in order to obtain the full action of the drug. In some other cases of chronic eczema and psoriasis, the same benefit has followed in as short a time as in the case above mentioned.—Malcolm Morris, in *British Medical Journal.*

---

The Nutritive Value of Beef Tea.—Virchow, the eminent German physiologist, says that beef tea, which is vulgarly supposed to contain nearly all the valuable elements of the meat, is only of value as a condiment. If drank while warm it is of about the same value as tea or coffee, but contains less heat or flesh-producing substances than beer or wine. It is of high value as a nerve stimulant, and through this property it produces the impression of being itself strengthening.—*The Druggist.*

## Society Proceedings.

### American Medical Association.

THIS body held its thirty-third annual meeting at St. Paul, Minn., June 6th, 7th, 8th and 9th. It met in the Opera House and was called to order at 11 A. M. by the chairman of the committee of arrangements, Dr. A. J. Stone. The chair was taken by Dr. P. O. Hooper, of Little Rock, Arkansas, first vice-president, in the absence of President Woodward.

Prayer was offered by Rt. Rev. John Ireland.

The address welcoming the association to St. Paul and Minnesota was given by the governor, Gen. Lucius F. Hubbard, in which he recounted the healing character of the Minnesota air and the virtues of her medical profession. Expressing his sympathy with the objects of the asssociation, he bade it a hearty welcome to the Northwest.

Dr. Stone, chairman of committee of arrangements, then made his report, detailing the order of business (which was printed). He also announced that a reception would be given on that evening at the Metropolitan Hotel; on Wednesday evening by members of the medical profession and citizens at their private residences, and on Thursday evening a grand entertainment by the Hon. M. Sabine, at Stillwater.

Protests were read by the secretary against the admission of delegates from the New York State Medical Society, from several state and local societies and from ex-Presidents Gross and Sayre. They were all referred to the Judicial Council.

Vice-President Hooper then delivered the annual address, in which he regretted the illness which prevented the president from fulfilling his duties, and to whom he paid a handsome tribute and deserved compliment.

He referred to the cordial welcome extended by the governor and chairman of the committee of arrangements; sketched briefly the progress of the association to the present time, and the chiefs who are no more, who were its originators; spoke favorably of the proposed medical journal in the place of the annual volume; of the importance of sanitary laws, compulsory vaccination, and the Code of Ethics. A fit and touching reference was made to the death of Dr. John T. Hodgen, who had presided over the association at Richmond in 1881.

The address was received with applause and a copy requested for publication.

Letters of regret were read from absentees, notably from Drs. Woodward and Huton.

On motion the members of the Minnesota Medical Society, then in session at St. Paul, were elected members by invitation.

Dr. N. S. Davis presented a preamble and resolution from the Women's National Christian Temperance Association, which on motion were referred to the Section on State Medicine and Medical Jurisprudence.

The registration list was then read, when the association adjourned to meet next day at 10 o'clock.

WEDNESDAY, JUNE 7—SECOND DAY.

Called to order by Dr. P. O. Hooper.

Prayer by Rev. D. R. Breed.

Dr. Stone, of the committee of arrangements, further reported an invitation from the mayor and council of the city of Fargo, Dakota Territory, inviting the association to be their guests and tendering free transportation; also excursions for Bear Lake and Stillwater, Lake Minnetonke and other places of resort.

Atlantic City, Detroit and Cleveland sent invitations for the association to hold its next meeting at their respective cities. On motion, they were referred to the committee on nomination.

The secretary then announced the committee on nominations as selected by the various state delegations:

Arkansas—L. J. Dibrell.
Alabama—
Colorado—J. Hawes.
California—H. S. Orme.
Connecticut—W. G. Bronson.
Dakota—S. B. McGlumphy.
District of Columbia—W. D. Marmion.
Florida—
Georgia—W. F. Holt.
Illinois—T. F. Worrell.
Indiana—W. Lomax.
Iowa—T. J. Caldwell.
Kansas—J. Bell.
Kentucky—L. S. McMurtry.
Louisiana—J. W. Dupree.
Maryland—Wm. Lee.
Michigan—F. Pratt.
Massachusetts—M. G. Parker.
Minnesota—W. W. Mayo.
Maine—T. A. Foster.
Missouri—A. T. Steele.
Mississippi—U. A. Grant.
Nevada—
Nebraska—L. J. Abbott.
North Carolina—E. Grissom.
New Hampshire—
New York—W. C. Heustead.
New Jersey—S. S. Clark.
Ohio—X. C. Scott.
Oregon—
Pennsylvania—A. Friecka.
Rhode Island—A. Ballou.
South Carolina—
Tennessee—T. B. Lindsley.
Texas—W. H. Park.
Virginia—F. D. Cunningham.
Vermont—S. W. Thayer.
Wisconsin—N. Senn.
West Virginia—
U. S. Army—Perrin.
U. S. Navy—John M. Brown.
U. S. Marine Hospital—O. W. Miller.

Dr. Denison of Colorado, presented a declaration of principles which on motion was referred to the Judicial Council.

On motion the traveling expenses of the treasurer were ordered paid.

Dr. Packard then read the report of the committee on journalizing the transactions, which was accepted and made the special order for Thursday morning.

The amendment to the bye-laws authorizing permanent members to vote, introduced at the last meeting, was laid on the table.

Vice-President Connor in the chair.

Dr. Octerlony, of Louisville, chairman of the section on practice of medicine, delivered his annual address. Also Dr. H. O. Marcy, of Boston, chairman section of obstetrics, which latter was illustrated by microscopic preparations thrown on the screen by the solar microscope.

The Judicial Council reported in part as follows:

In regard to the Nebraska State Society referred to us last year, the council reports that a careful examination of the documents and matters involved in the protest of certain members of the Nebraska State Association against the admission of said society to representation in the American Medical Association, shows no proper cause for such protest at the present time, and the council decide that the society is entitled to full representation by delegates to this association.

In regard to the resolution concerning the use of *remedies controlled by a patent, copyright or trade-mark*, which was reported from the section on practice of medicine, materia medica and by the association, referred to judicial council last year, the council has decided that inasmuch as the resolution includes matters not referred to in the code of ethics, and said code contains all that is necessary for the guidance of the medical profession, therefore the resolution should not be adopted by the members of the association.

NO ADMITTANCE FOR NEW YORK DELIGATES.

In regard to the protest against the receiving of delegates from the New York State Medical Society, which was referred to us, the judicial council decide as follows:

Having carefully examined the code of ethics adopted by the New York State Medical Society at its annual meeting in February, 1882, as furnished us by the secretary of said society, the judicial council find in said code provisions essentially differing from and in conflict with the code of ethics of this association, and therefore, in accordance with provision of rule 9 of the bye-laws of this association, decide unanimously that the said New York Society is not entitled to delegates in the American Medical Association.

The conclusion of this report was received with long continued applause.

The association then adjourned.

THURSDAY JUNE 8—THIRD DAY.

The association came to order at noon, Vice-President Hooper in the chair.

Prayer by Rev. W. N. Gilbert.

The report of the committee on nomination was then made and referred back to them for correction, for not having complied with the order of last year in reporting names not present.

The secretary announced that Dr. Packard, chairman of the committee on journalizing the proceedings, had left the city, but that the report having been published in the newspapers and left in his hands was before the association.

Dr. N. S. Davis, of Chicago, deemed the step an important one. The former reports had been incomplete and a change was desired. This was not because of the flings made by so called medical journals about the immense pile of trash in

the reports, but that the record might be ready for those who were interested in the grand work of the association. He would, therefore, as a member of the committee, offer the following resolutions:

*Resolved*, That the interests of the association would be promoted by the publication of its transactions in a weekly medical journal under its own control, instead of in an annual volume as heretofore, provided it could be done without involving pecuniary embarrassment, or so far engrossing its funds as to prevent the annual encouragement of original investigations by its members.

*Resolved*, That so much of the report of the committee on journalizing the transactions as relates to the increase of membership of this association by applications from members of state and local societies be and the same is hereby approved.

*Resolved*, That so much of the report of the committee on journalizing the transactions of the association as relates to the appointment of a board of trustees, nine in number, and their duties be and the same is hereby adopted, and that the president of the association now appoint a special committee of seven to recommend to this meeting of the association the names of nine members for election to constitute said board of trustees.

*Resolved*, That the board of trustees so appointed be requested to present as early as possible a plan of a medical journal to be called the Journal of the American Medical Association, and to send circulars explaining such plan and asking pledges of support by actual subscription, to the members of the medical profession throughout the whole country, and thereby ascertain, as reliably as possible, what degree of support the proposed journal can have as a basis for commencing its publication. And that said board also proceed to ascertain and agree upon the best methods of publishing said journal, the best editorial services it can secure to take charge of the work and the best plans for its issue.

*Resolved*, That said board of trustees be and are hereby instructed under all circumstances, in whatever plans or contracts it proposes to adopt, to retain the entire control over the use of the advertising as well as of all other pages of the journal that is proposed to be established, and that said board report in full at the next meeting of this association the plans upon which it has been able to agree, together with the response of the profession to its circulars asking actual subscription to the proposed journal, and that the constitutional amendment proposed by Dr. Packard last year be continued upon the table until the report of the board of trustees is received and acted upon.

*Resolved*, That the treasurer of the association is hereby authorized to pay out of funds in the treasury the necessary expenses of the board of trustees in printing and distributing its circulars and in conducting its proper correspondence

*Resolved*, That the committee on publication proceed to publish the proceedings and transactions of the present meeting in a volume as heretofore, using all diligence to give it an early distribution to those entitled to receive it.

Continuing his remarks, Dr. Davis said:

Having paid the most careful attention to the subject, yet I am not certain as to the success in this country. These resolutions are for the purpose of seeing if it can be done with a good, harmonious board of trustees—and the resolutions so cover it that in case they fail it will be provided for. We refer to the British Medical Journal as an example of success. Great Britain is hardly larger than one of our states. While on a continent there are twenty places desiring to be the center of medical knowledge, in England it is condensed. Here we must have a most harmonious committee. If they are procured, and can act, the success is certain; and at the close of the year further arrangements can be made.

Dr. Brodie moved the adoption of the above resolutions, which motion was carried. The president appointed as committee on journal, as provided for in Dr. Davis' resolution, the following:

L. A. Sayre, New York.
J. M. Toner, District of Columbia.
Foster Pratt, Michigan.
R. J. Dunglison, Pennsylvania.
Robert Battey, Georgia.
W. F. Peck, Iowa.
H. O. Marcy, Massachusetts.

Dr. A. L. Gihon, United States navy, reported the following resolution from the section on State Medicine, and urged its adoption:

*Resolved*, That we deem it advisable and more conducive to the ends of justice, where medical men are summoned as experts, that they be so summoned by the court and not, as now, by the counsel on either side.

It was laid on the table on motion of Dr. Pratt, of Michigan. A rising vote was necessary and it showed 194 against and 82 for its adoption. Dr. Gihon then introduced a resolution calling upon congress to support the surgeon general in the establishment of a museum of hygiene already founded at Washington. It was carried.

Dr. N. S. Davis then read a communication from those physicians employed among the Indians asking that the constitution be so changed as to give them a representation in the association. As it required a change of the constitution by law, it went over until next year.

Dr. N. S. Davis then read the following resolutions:

Whereas, It appears from the amended bill making appropriations for the army for 1882–83 as recommended by the military committee of the senate, that the amount appropriated for the support of the army medical museum and library has been reduced from $10,000 to $5,000.

*Resolved*, first, That this association views with great regret and strong disapproval this attempt to cripple two institutions whose great value is recognized by the medical profession of the United States as well as of Europe.

Second—That in the case of the library, whose collection of medical journals required years of unceasing effect to bring it to its present completeness, the intended reduction will be especially injurious, as from their transient character such publications would be in many instances irreplaceable.

Third—That the publication now in progress of the index catalogue of the library, the most extensive work of the kind ever attempted, makes it desirable that its completeness should not be lessened by the withdrawal of the means to procure current medical literature.

Fourth—That this association express the earnest hope that congress will restore the appropriation to its former amount in the interests of the medical profession, and therefore of the community at large.

These resolutions were adopted and a printed copy ordered to be sent to each member of congress and the heads of all the departments.

Dr. Toner presented the report of the committee on necrology, which was referred to the committee on publication.

Dr. Davis read the report of the committee on meteorological and clinical records, which was accepted and their recommendations adopted. The committee was continued and $500 appropriated for the investigations.

The Judicial Council reported as follows: In the case of the protest of the delegates from the Nebraska State Medical Society against the admission of Dr. Joseph Neville as a delegate from the Omaha Medical Society, the council decide that the protest of the delegates of the State Society of Nebraska is sustained, inasmuch as Dr. Joseph Neville has been dropped from the State Medical Society for the non-payment of dues, and is therefore by the provisions of the fifth section of article second of the constitution of the association, incapacitated for registration here until he regains his proper standing in said State Society, and therefore dismiss the appeal.

In the case of the charges with specifications made against Dr. D. W. Day by delegates from the Eau Claire Medical Society, and from permanent members, your council, after full examination of the witnesses and papers on both sides, decides that the first, second, fourth and sixth charges are fully sustained, and therefore that said Dwight W. Day is no longer entitled to recognition as a member of this association. The council further decides from the evidence before it that the Eau Claire Medical Society needs a thorough reorganization before it can be justly entitled to representation by delegates in this association.

In the case of S. P. Collins, from Hot Springs, Ark., it is in evidence before us that he has been dropped from membership of the society to which he belonged, for non-payment of dues, and therefore is not entitled to registration as a permanent member in this association.

In the case of the appeal of John C. Cotton from the decision of the censors of the Crawford county, Ind., society, and the State Medical Society of Pennsylvania, we find no just cause for sustaining the appeal.

Dr. Wm. A. Byrd, chairman of the Section on Surgery and Anatomy, then read his address, which was referred to the section for discussion.

Dr. A. L. Gihon, chairman of the Section on State Medicine, read his address, which was referred to the committee on publication.

On motion, adjourned.

FRIDAY, JUNE 9—FOURTH DAY.

Called to order at 10 o'clock by Vice-President Hooper.

Prayer by Rev. E. D. Neill,

Dr. Stone, from the committee of arrangements, informed the association that their passes over all the railroads would be good to the 15th of July to go and come when they pleased and where they pleased, mentioning White Bear Lake, Great Bear Lake, Duluth, Winnipeg, the Yellow Stone and other places of interest. Received with applause.

The librarian, treasurer, and committee on publication made their reports, which were accepted and referred to the committee on publication.

A general index of all the proceedings, including the present volume, was ordered published.

On motion of Dr. Keller, of Arkansas, the secretaries of the different state medical societies were requested to send to the permanent secretary, annually, a corrected list of the membership of their respective societies.

On motion of Dr. Grissom, N. C., an honorarium of $1000 was voted the permanent secretary.

Several amendments to the constitution were offered by Drs. Toner, Davis, Pratt, Keller and Sears, which were laid over according to the rules to next year.

The committee on nominations made their amended report as follows:

Next place of meeting, Cleveland, Ohio, June, 1883.

President—John L. Atlee, Philadelphia.

First Vice-President—Eugene Grissom, North Carolina.

Second Vice-President—A. J. Stone, Minnesota.

Third Vice-President—J. A. Octerlony, Kentucky.

Fourth Vice-President—H. S. Orme, California.

Treasurer—R. J. Dunglison, Pennsylvania.

Librarian—C. H. A. Kleinschmidt, Washington.

Chairman of Committee on Arrangements—X. C. Scott, Cleveland.

Assistant Secretary—I. N. Hines, Cleveland.

Members of Judicial Council—N. S. Davis, Illinois; J. M. Brown, United States Navy; X. C. Scott, Ohio; M. Sexton, Indiana; N. C. Husted, New York; Wm. Lee, Maryland; J. E. Rives, West Virginia—for three years.

OFFICERS OF THE VARIOUS SECTIONS.

Practice of Medicine—J. H. Hollister, Illinois, chairman; J. G. Lee, Pennsylvania, secretary.

Surgery and Anatomy—W. F. Peck, Iowa, chairman; Paul F. Eve, Tennessee, secretary.

Obstetrics—J. K. Bartlett, Wisconsin, chairman; G. A. Moses, Missouri, secretary.

Medical Jurisprudence and State Medicine—Foster Pratt, Michigan, chairman; Thomas L. Neal, Ohio, secretary.

Ophthalmology, Otology and Laryngology—A. W. Calhoun, Georgia, chairman; Carl Seiler, Pennsylvania, secretary.

Diseases of Children—R. Blount, Indiana, chairman; J. H. Sears, Texas, secretary.

Dentistry—D. H. Goodwillie, New York, chairman; T. W. Brophy, Illinois, secretary.

COMMITTEE ON NECROLOGY.

Dr. J. M. Toner, Washington, chairman; Alabama, vacant; California, Dr. J. H. Woolsey; Colorado, Dr. Charles Denison; Connecticut, Dr. W. C. Burke; Dakota, Dr. O. S. Pine; Florida, vacant; Delaware, vacant; Georgia, Dr. Robert Battey; Illinois, Dr. J. H. Holister; Indiana, Dr. G. L. Sutton; Iowa, S. B. Chase; Kansas, Dr. C. V. Maleram; Kentucky, Dr. J. W. Brooks; Louisiana, Dr. J. W. Dupree; Maine, Dr. A. Garcelon; Maryland, Dr. Wm. Lee; Massachusetts, Dr. H. O. Marcey; Michigan, Dr. W. F. Breakey; Minnesota, Dr. D. W. Hand; Mississippi, Dr. H. A. Grant; Missouri, Dr. C. L. Hall; Nebraska, Dr. R. C. Moore; New Hampshire, vacant; New York, Dr. J. A. Chapman; New Jersey, Dr. E. A. Watson; North Carolina, Dr. C. W. Woolen; Ohio, Dr. J. F. Russell; Oregon, vacant; Pennsylvania, Dr. Frank Woodbury; Rhode Island, D. A. Ballou;

South Carolina, vacant; Tennessee, Dr. J. B. Lindsley; Texas, Dr. H. C. Ghent; Vermont, Dr. O. F. Tassett; Virginia, Dr. F. D. Cunningham; West Virginia, I. V. K. Curtis; Wisconsin, J. T. Reeve; United States Army, G. Perrin; United States Navy, F. M. Grinnell; United States Marine Hospital Service, F. W. Miller.

COMMITTEE ON PUBLICATION.

Drs. W. B. Atkinson, Albert Frincke, J. S. Cohen, F. Woodbury, J. H. Packard, J. R. Dunglison, J. V. Shoemaker.

COMMITTEE ON STATE MEDICINE.

Alabama, vacant; Arkansas, D. C. Ewing; California, J. O. Tucker; Colorado, C. Denison; Connecticut, W. C. Willey; Delaware, vacant; District of Columbia, D. W. C. Patterson; Dakota, S. B. McGlumpty; Florida, vacant; Georgia, H. F. Campbell; Illinois, H. A. Johnson; Indiana, T. M. Stevens; Iowa, D. W. Crouse; Kansas, J. Bell; Kentucky, T. B. Greenly; Louisiana, J. W. Dupree; Maine, F. B. Ferguson; Maryland, Wm. Lee; Massachusetts, M. G. Parker; Michigan, R. C. Kedzie; Minnesota, C. N. Hewitt; Mississippi, H. A. Grant; Missouri, E. W. Schauffler; Nebraska, E. M. Whillen; New Hampshire, J. A. Sanborn; New Jersey, D. C. English; New York, E. M. Moore; North Carolina, C. W. Woolen; Ohio, J. Ransohoff; Oregon, vacant; Pennsylvania, A. H. Smith; Rhode Island, J. N. Eldridge; South Carolina, vacant; Tennessee, V. S. Lindsley; Texas, W. H. Parke; Virginia, F. D. Cunningham; Vermont, S. W. Thayer; West Virginia, John Frizzel; Wisconsin, J. T. Reeve; United States Army, W. C. Spencer; United States Navy, A. L. Gihon; United States Marine Hospital Service, F. W. Miller.

On motion of Dr. H. O. Marcy, a vote of thanks was extended to the treasurer for his able services.

Dr. Denison, of Colorado, offered a resolution to the effect that no action of this association, either in its code or in its proceedings at its annual meetings, should be considered as endorsing the view that the members are "allopaths," or that there is any such thing as an allopathic physician. Adopted.

The committee to nominate trustees for journalizing the proceedings under the resolution of Dr. Davis, reported the following, which was adopted:

For three years—Drs. Davis, Chicago; Moore, New York, and Toner, Washington.

For two years—Drs. Campbell, Georgia; Packard, Pennsylvania, and Connor, Michigan.

For one year—Drs. Hooper, Arkansas; Garcelon, Maine, and McMurtry, Kentucky.

Dr. Brodie, of Detroit, Mich., then offered the following resolutions, and called on Dr. Davis to second them:

*Resolved*, That the heartfelt thanks of this association are hereby expressed to the citizens and the members of the medical profession of St. Paul for the munificent hospitality with which we have been received and entertained during the present annual meeting; to the committee on arrangements, and especially to Dr. A. J. Stone; to the members of the daily press for their uniform courtesy and the general faithfulness of their reports of our proceedings; to all the superintendents of all the railroads that have granted to delegates, permanent members and their friends reduction in rates; to the citizens, especially the Hon. D. M. Sabin, and the profession of Stillwater for their charming entertainment; and to all the citizens of the further northwest for their invitation and promised welcome to all who may visit their beautiful and fertile section of country.

SOCIAL AMENITIES.

*Resolved*, That, by the adoption of this resolution, we express our desire to foster the social element of our profession, and we shall carry away with us life-long remembrances of this rich and prosperous section of our united country, and also the courtesy, the kindness and the hospitality of the citizens of St. Paul.

In seconding the vote of thanks, Dr. N. S. Davis remarked:

The main object of this association is the pursuit of scientific knowledge. There are other benefits which accrue to us besides this; one of them is the meeting in this association of members of the profession from all parts of the country. Then we meet the people of the different sections in which our meetings are held. This destroys all clannish influences and enhances our enjoyment. We have been received everywhere with open hands and hearts, but at no time in the history of the association, nowhere in the country, have we been received with such unbounded hospitality as in Minnesota.

Not only St. Paul but all the state, in fact the whole Northwest, the people, press and railroads have treated us royally—beyond anything that we ever experienced before.

Our thanks are due especially to a neighboring city and its leading citizens for the pleasure they have afforded us. I say this in no complimentary vein, but with all the candor of my nature. Words are too feeble for this association to use in the expression of its appreciation of the hospitality extended to it. When the vote is taken on these resolutions let it be a hearty one and not mere lip service.

The resolutions were adopted by a unanimous vote followed by long and loud applause.

Dr. Goodwillie, Chairman of the Section on Dentistry, read his address which was referred to the committee on publication.

The President announced delegates to foreign societies. Drs. Emmet, Lewis, Carpenter, Brush, Da Costa to British Medical Association, and Brodie to the Canadian Medical Association.

On motion Dr. Davis, of Chicago, was appointed to conduct the President elect to the platform. Dr. Atlee was greeted with applause and thanked the members for the honor conferred upon him.

On motion a vote of thanks was given to Dr. Hooper, by a standing vote. He responded feelingly and at 12:40 o'clock on motion of Dr. Toner the 33d annual meeting was declared adjourned to meet in Cleveland, O., the first Tuesday in June, 1883. Whole number registered was 947.

---

HARRIS ON BORACIC ACID APPLIED LOCALLY IN DIPHTHERIA.—Mr. T. D. Harris adds another to the already long list of specifics for local application in this disease. In the Lancet, Feb., 1882, p. 306, he states that a solution of boracic acid, two drachms to the ounce of a mixture of equal parts of glycerine and water, freely applied to the diseased parts, is a most certain and speedy cure.—R. Neale, M. D., in *London Med. Record.*